United States Environmental Protection Agency, Region III Corrective Action Program

FINAL ADMINISTRATIVE RECORD

Former Rehrig International 901 North Lombardy Street EPA ID NO. VAD 089 028 377 Richmond, VA 23220 **Section 1**

Statement of Basis



UNITED STATES

ENVIRONMENTAL PROTECTION AGENCY

REGION 3

STATEMENT OF BASIS

FORMER REHRIG INTERNATIONAL

RICHMOND, VIRGINIA

EPA ID NO. VAD 089 028 377

MARCH 18, 2009

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I. INTRODUCTION

A. Facility Name

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) for the Former Rehrig International Facility located at 901 North Lombardy Street, Richmond, VA 23220 (hereinafter referred to as the Facility).

The Facility is subject to the Corrective Action Program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. Sections 6901 to 6992k. The Corrective Action Program is designed to ensure that certain facilities subject to RCRA have investigated and cleaned up any releases of hazardous waste and waste constituents that have occurred at their property.

Information on the Corrective Action Program can be found by navigating http://www.epa.gov/reg3wcmd/correctiveaction.htm.

B. Proposed Decision

This SB explains EPA's proposed decision that Corrective Action is complete and no land use controls are required for the Facility. EPA's proposed decision is based on a review of EPA and Virginia Department of Environmental Quality (VDEQ) files regarding the environmental history of the Facility as presented in the Final RCRA Site Visit Report submitted on March 26, 2007. Based on this review, EPA has concluded that there are no current or unaddressed releases of hazardous waste or hazardous constituents from the Facility.

C. Importance of Public Input

Before EPA makes a final decision on its proposal for the Facility, the public may participate in the remedy selection by reviewing this SB and documents contained in the Administrative Record (AR) for the Facility. The AR contains the complete set of reports that document Facility conditions, including a map of the Facility, in support of EPA's proposed decision. EPA encourages anyone interested to review the AR. A copy of the AR is available for public review from the EPA Region 3 office, the address of which is provided in Section V, below.

EPA will address all significant comments received during the public comment period. If EPA determines that new information or public comments warrant a modification to the proposed decision, EPA will modify the proposed decision or select other alternatives based on such new information and/or public comments. EPA will approve its final decision in a document entitled the Final Decision and Response to Comments (FDRTC).

II. FACILITY BACKGROUND

The Former Rehrig International Facility is located at 901 North Lombardy Street, in Richmond, Virginia. The Facility was constructed in 1904, and was operated by Rehrig International from 1979 until 2000.

The Facility is located in an urban commercial, industrial and residential area. The closest residence is approximately 500 feet from the Facility. The closes surface water body is the James River, 1.6 miles south of the Facility.

Facility operations included manufacturing of shopping carts and shopping baskets. The manufacturing process consisted of metal fabrication, injection molding, and metal plating. Ancillary equipment used by Rehrig included a wastewater treatment system, a diesel fuel Underground Storage Tank (UST), a waste oil Aboveground Storage Tank (AST), and a hydraulic oil AST.

Rehrig's manufacturing activities ceased in 2000, and the Facility was sold in 2002. The Facility has been demolished and a Kroger's grocery store and small retail shops have been constructed in its place.

The Facility at one time operated under interim permit status for container and tank storage. Additionally, the Facility was a large quantity generator (LQG) of hazardous waste.

III. SUMMARY OF ENVIRONMENTAL HISTORY

A 1993 Environmental Site Assessment Update Report identified historical occupants of the Facility to include the State Penitentiary, a book binding business, and an air filter products manufacturer. The Facility was initially constructed by the Export Leaf Tobacco Company and was used for tobacco leaf storage until 1977. Bowe Street Associates purchased the property in 1977. The property remained vacant until 1979 when Rehrig leased a portion of the onsite building. The Facility was again sold in May 2002, to the Broad Street Associates, and again in June 2003 to New River Real Estate. A grocery store and strip mall currently occupy the site.

According to the 1993 Environmental Site Assessment Update Report, the manufacturing process consisted of metal fabrication, injection molding that produced high-density polyethylene (HDPE) parts, and metal plating of nickel and chromium onto the metal parts of the shopping carts (a new plating system was installed in 1993). Ancillary equipment used by Rehrig included a wastewater treatment system, diesel fuel UST, a waste oil AST, and a hydraulic oil AST. Rehrig plated and assembled approximately ½ million shopping carts and baskets per year.

Hazardous chemical storage areas were used at the site, and Rehrig was a LQG of hazardous waste.

Rehrig treated wastewater generated by the Facility's nickel and chromium electroplating operations in an on-site wastewater treatment system. This wastewater treatment system included 4 stages of treatment in tanks, followed by waste treatment using a filter press to remove water from settled solids. Wastewater from the tanks and filter presses were discharged to the sanitary sewer system in accordance with a Pretreatment Permit issued and administered by the City of Richmond. This Permit was a requirement of the City's Virginia Pollution Discharge Elimination System (VPDES) Municipal Wastewater Treatment Permit issued by the State Water Control Board and VDEQ.

A letter from the Virginia Department of Waste Management to Rehrig dated November 6, 1990 indicated that hazardous waste closure of the Facility had been completed in accordance with the approved closure plan; however, it is not clear if this closure addressed all waste management units.

A Virginia Waste Management Board Consent Order was issued on January 23, 1997 which described numerous violations observed during a July 11, 1996 VDEQ inspection. Violations included administrative items (manifest issues, no job titles for employees who manage hazardous waste, and failure to maintain tank assessment records) and physical violations (failure to keep all containers of hazardous waste closed, storage of incompatible materials, and improper secondary containment). This Order indicated that violations were to be corrected in 90 days. A May 15, 1998, letter from the VDEQ indicated that the facility met the terms of the Order and that the Order had been terminated.

Rehrig operated a wastewater treatment facility under a Pretreatment Permit issued by the City of Richmond; the wastewater discharge from this system was administered and regulated under the City's Municipal VPDES Permit. Rehrig admitted in its plea that in 1998, the company violated its VPDES Permit numerous times by discharging excessive amounts of nickel and chromium (up to 30 times its permitted limits). The City issued Rehrig several citations, and in December 1998 found Rehrig in significant noncompliance with its permit. A May 15, 1998 letter from VDEQ to Rehrig indicated that the Facility met the terms of the Order, and that the Order had been terminated. In early 1999, Rehrig agreed to improve its water treatment system.

In 2001, Rehrig pleaded guilty to criminal violations of the Clean Water Act and was ordered to pay \$500,000 for fines, implement pollution prevention improvements at its plant, and perform community service.

Rehrig continued to periodically violate its VPDES Permit, according to EPA officials. At this time, Rehrig began moving its operations to a new site in neighboring Chesterfield County, Virginia.

Rehrig later acknowledged this discharge occurred as a result of lack of staff resources, according to EPA documents. In late September 1999, after additional permit violations by Rehrig and additional citations by the City of Richmond, Rehrig's discharges violated its permit on each of five consecutive days.

After Rehrig pleaded guilty to two criminal misdemeanors, the company was fined \$200,000, ordered to make a \$290,000 payment for adding pollution prevention/control equipment at its new plant (Chesterfield County Facility), and ordered to make a \$10,000 contribution to the James River Advisory Council, a group formed to protect the River. Rehrig was also required to submit an environmental compliance program to the court and its employees were required to perform 400 hours of community service.

Subsequently, Rehrig replaced its plating manager, plant manager, and vice president for production. Rehrig then contracted with an environmental consulting firm to perform wastewater treatment, and operated in compliance with its Chesterfield County Clean Water Act permit. During an unannounced September 10, 2002 compliance inspection, VDEQ determined that Rehrig no longer operated the site. The VDEQ Office of Waste Programs was requested to deactivate the VAD identification number.

In summary, the hazardous waste releases were addressed and closure was certified by the VDEQ on November 6, 1990 and May 15, 1998. All Clean Water Act violations of the VPDES Permit were resolved by the assessment of fines, implementation of pollution prevention improvements, performing community service and eventually closing of the facility.

IV. EVALUATION OF EPA'S PROPOSED DECISION

EPA has determined that its proposed decision for the Facility is protective of human health and the environment and that no further corrective action or controls are necessary at this time.

V. PUBLIC PARTICIPATION

Interested person are invited to comment on EPA's proposed decision. The public comment period will last thirty (30) calendar days from the date the notice is published in a local newspaper. Comments may be submitted by mail, fax, e-mail, or phone to Mr. Denis Zielinski at the address listed below.

A public meeting will be held upon request. Requests for a public meeting should be made to Mr. Denis Zielinski at the address listed below. A meeting will not be scheduled unless one is requested.

The Administrative Record contains all the information considered by EPA for the proposed decision at this Facility. To receive a copy of the Administrative Record, contact Mr. Denis Zielinski at the address below:

U.S. EPA Region 3 1650 Arch Street Philadelphia, PA 19103 Contact: Mr. Denis Zielinski (3LC20) Phone: (215) 814-3431

Fax: (215) 814-3114 Email: <u>zielinski.denis@epa.gov</u>

Section 2

Environmental Indicator Forms

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final 2/5/99

RCRA Corrective Action

Environmental Indicator (EI) RCRIS code (CA725) Current Human Exposures Under Control

Facility Name:

Former Rehrig International Facility

Facility Address:

901 North Lombardy Street, Richmond, Virginia

Facility EPA ID #: VAI

VAD 089 028 377

1.	Has all available relevant/significant information on known and reasonably suspected releases to soil groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been considered in this EI determination?						
	\boxtimes	If yes - check here and continue with #2 below.					
		If no - re-evaluate existing data, or					
		If data are not available, skip to #6 and enter "IN" (more information needed) status code.					

BACKGROUND

The former Rehrig facility is located at 901 North Lombardy Street, Richmond, Virginia. The site is located in an urban commercial, industrial, and residential area. According to the City of Richmond property report, the site address is also known as 630 Bowe Street and 800 Bowe Street. The current owner is Kroger Real Estate Department of Roanoke, Virginia.

The first known facility structure was a single building constructed in 1904 by the Export Leaf Tobacco Company and was used for tobacco leaf storage until 1977. Bowe Street Associates purchased the property in 1977. The property remained vacant until 1979 when Rehrig leased a portion of the onsite building. According to the 1993 Environmental Site Assessment Update Report, the State Penitentiary, a book binding business, and an air filter products manufacturer also historically occupied the site. Previous owners were listed as the Broad Street Associates, who purchased the property in May 2002 and New River Real Estate who purchased the property in June 2003.

The Rehrig facility was approximately 250,000 square feet in size. Rehrig manufactured grocery shopping carts and shopping baskets at the site from 1979 to 2000. According to the 1993 Environmental Site Assessment Update Report, the manufacturing process consisted of metal fabrication, injection molding that produced high-density polyethylene (HDPE) parts, and metal plating of nickel and chromium onto the metal parts of the shopping carts (a new plating system was installed in 1993). Ancillary equipment used by Rehrig included a wastewater treatment system, diesel fuel Underground Storage Tank (UST), a waste oil Aboveground Storage Tank (AST), and a hydraulic oil AST. Rehrig plated and assembled approximately ¼ million shopping carts and baskets per year.

The Rehrig facility maintained an onsite wastewater treatment system to treat process water that contained nickel and chromium electroplating operations in an on-site wastewater treatment system. This system discharged treated water to the City of Richmond under a Pretreatment Permit issued and administered by the City of Richmond.

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the

environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Current Human Exposures Under Control" EI

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

Duration / Applicability of EI Determinations

El Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be "contaminated" above appropriately protective risk-based "levels" (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

	Yes	<u>No</u>	?	Rationale / Key Contaminants
Groundwater		X		
Air (indoors) ²		X		
Surface Soil (e.g., <2 ft)		X		
Surface Water		X		
Sediment		X		
Subsurf. Soil (e.g., >2 ft)		X		
Air (outdoors)		X		

If yes (for any media) - continue after identifying key contaminants in each "contaminated" medium, citing appropriate "levels" (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation. If unknown (for any media) - skip to #6 and enter "IN" status code.	\boxtimes	If no (for all media) - skip to #6, and enter "YE," status code after providing or citing appropriate "levels," and referencing sufficient supporting documentation demonstrating that these "levels" are not exceeded.
If unknown (for any media) - skip to #6 and enter "IN" status code.		citing appropriate "levels" (or provide an explanation for the determination that the medium could pose
		If unknown (for any media) - skip to #6 and enter "IN" status code.

Rationale and Reference(s):

Two releases to the environment occurred at the site and were remediated to regulatory agency satisfaction, as follows.

- Hydraulic oil-contaminated soil was discovered during facility expansion activities and removed. This incident was closed to the satisfaction of the State Water Control Board and the Richmond Fire Department.
- Soil contamination below Virginia State Water Control Board reportable levels was detected during a 1989 diesel fuel UST removal activity

No evidence of other spills other releases were found during the November 2, 2006 RCRA Corrective Action site visit.

No groundwater monitoring wells are known to have been installed at the site nor was groundwater encountered in 15-foot deep soil borings advanced in 1993. While groundwater quality is unknown as described below, it is not used for potable purposes. No groundwater wells were located within a three-mile radius of the site at the time of the 1989 Preliminary Assessment Report. The 1989 Preliminary Assessment Report indicated that groundwater contamination was not expected due to the plating tanks having concrete containment systems and the fact that all processes took place indoors.

Potable water is supplied to the former Rehrig site and surrounding area by the City of Richmond. The source of the water is the James River; the intake is approximately three miles upstream and southwest of the site.

City of Richmond Ordinance Division 4 – Water Service Connections, Pipes, and Meters – Section 106-336 – Duties of Owners and Tenants indicates that all newly constructed or existing buildings be connected to the public water service system. The Ordinance also notes that owners who have used another water supply system (for example, a well) that was installed and used prior to January 1, 1970 are not required to have a public water connection if it can be proven that the alternative water supply is not detrimental to public health and safety, as approved by the Richmond City Health District. The ordinance also states that a property owner is able to drill a new potable well provided the Richmond City Health District approves the well and water quality.

TtEC contacted the Richmond City Health District for clarification of this ordinance. An environmental inspector indicated that 98 percent of the City of Richmond is served by municipal water (the vicinity of the site is included in this 98 percent) and that the District does not approve wells for potable use. The inspector reported that if there are any wells in the vicinity of the site, they are for irrigation purposes only.

The former Rehrig site is now the location of a Kroeger's Grocery Store and small retail stores. No documentation was found in VDEQ or USEPA Region III files regarding indoor or outdoor air issues.

Footnotes:

- ¹ "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based "levels" (for the media, that identify risks within the acceptable risk range).
- ² Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

3. Are there **complete pathways** between "contamination" and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

Potential **Human Receptors** (Under Current Conditions)

"Contaminated" Media	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food ³
Groundwater							
Air (indoors)							
Soil (surface, e.g., <2 ft)						·	
Surface Water							
Sediment				-			
Soil (subsurface e.g., >2 ft)							
Air (outdoors)							

Instructions for **Summary Exposure Pathway Evaluation Table**:

- 1. Strike-out specific Media including Human Receptors' spaces for Media, which are not "contaminated" as identified in #2 above.
- 2. Enter "yes" or "no" for potential "completeness" under each "Contaminated" Media -- Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential "Contaminated" Media - Human Receptor combinations (Pathways) do not have check spaces ("____"). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

If no (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter "YE" status code, after explaining and/or referencing condition(s) in-place, whether natural or manmade, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).
If yes (pathways are complete for any "Contaminated" Media - Human Receptor combination) - continue after providing supporting explanation.
If unknown (for any "Contaminated" Media - Human Receptor combination) - skip to #6 and enter "IN" status code.

Rationale and Reference(s):

³ Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)

4.	"signifi magnitu identify contami	Can the exposures from any of the complete pathways identified in #3 be reasonably expected to be "significant" (i.e., potentially "unacceptable" because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable "levels" (used to identify the "contamination"); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable "levels") could result in greater than acceptable risks)?					
		If no (exposures can not be reasonably expected to be significant (i.e., potentially "unacceptable") for any complete exposure pathway) - skip to #6 and enter "YE" status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to "contamination" (identified in #3) are not expected to be "significant."					
		If yes (exposures could be reasonably expected to be "significant" (i.e., potentially "unacceptable") for any complete exposure pathway) - continue after providing a description (of each potentially "unacceptable" exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to "contamination" (identified in #3) are not expected to be "significant."					
		If unknown (for any complete pathway) - skip to #6 and enter "IN" status code					
Rationa	le and Re	eference(s):					
		question on whether the identified exposures are "significant" (i.e., potentially "unacceptable") consult a					
himan	haalth Di	ok Assessment specialist with appropriate education, training and experience					

	5.	Can the "significant" exposures (identified in #4) be shown to be within acceptable limits?
		If yes (all "significant" exposures have been shown to be within acceptable limits) - continue and enter "YE" after summarizing <u>and</u> referencing documentation justifying why all "significant" exposures to "contamination" are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).
		If no - (there are current exposures that can be reasonably expected to be "unacceptable")- continue and enter "NO" status code after providing a description of each potentially "unacceptable" exposure.
		If unknown (for any potentially "unacceptable" exposure) - continue and enter "IN" status code.
Rational	le and Re	ference(s):

6.	code C	ne appropriate RCRIS status codes for the Current Human Exposures Under Control EI (event .725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination ttach appropriate supporting documentation as well as a map of the facility).
		YE - Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at the Former Rehrig International facility, EPA ID # VAD 089 028 377, located at 901 North Lombardy Street in Richmond, Virginia under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.
	Ċ	NO - "Current Human Exposures" are NOT "Under Control."
		IN - More information is needed to make a determination.
	npleted by ervisor	(signature) (print) Denis Zielinski (title) Senie Regy (signature) Date 1/22/09 Date 1/22/09 Date 1/22/09 (print) Loss firs no (title) Less firs no (title) Less firs no (EPA Region or State) Region II.
Locations wh	ere Referenc	s may be found:
Was 1650	EPA Region I te & Chemic Arch Street adelphia, PA	Is Management Division
Contact teleph (nam (phote) (e-material)	ne) <u>Denis</u> ne #) 215-8	nil numbers 1. Zielinski 14-3431 ki.denis@epa.gov

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final 2/5/99

RCRA Corrective Action

Environmental Indicator (EI) RCRIS code (CA750) Migration of Contaminated Groundwater Under Control

Facility Name:

Former Rehrig International Facility

Facility Address:

901 North Lombardy Street, Richmond, Virginia

Facility EPA ID #:

VAD 089 028 377

1.	Has all available relevant/significant information on known and reasonably suspected releases to the groundwater media, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been considered in this EI determination?						
	\boxtimes	If yes - check here and continue with #2 below.					
		If no - re-evaluate existing data, or					
		If data are not available, skip to #8 and enter "IN" (more information needed) status					

BACKGROUND

The former Rehrig facility is located at 901 North Lombardy Street, Richmond, Virginia. The site is located in an urban commercial, industrial, and residential area. According to the City of Richmond property report, the site address is also known as 630 Bowe Street and 800 Bowe Street. The current owner is Kroger Real Estate Department of Roanoke, Virginia.

The first known facility structure was a single building constructed in 1904 by the Export Leaf Tobacco Company and was used for tobacco leaf storage until 1977. Bowe Street Associates purchased the property in 1977. The property remained vacant until 1979 when Rehrig leased a portion of the onsite building. According to the 1993 Environmental Site Assessment Update Report, the State Penitentiary, a book binding business, and an air filter products manufacturer also historically occupied the site. Previous owners were listed as the Broad Street Associates, who purchased the property in May 2002 and New River Real Estate who purchased the property in June 2003.

The Rehrig facility was approximately 250,000 square feet in size. Rehrig manufactured grocery shopping carts and shopping baskets at the site from 1979 to 2000. According to the 1993 Environmental Site Assessment Update Report, the manufacturing process consisted of metal fabrication, injection molding that produced high-density polyethylene (HDPE) parts, and metal plating of nickel and chromium onto the metal parts of the shopping carts (a new plating system was installed in 1993). Ancillary equipment used by Rehrig included a wastewater treatment system, diesel fuel Underground Storage Tank (UST), a waste oil Aboveground Storage Tank (AST), and a hydraulic oil AST. Rehrig plated and assembled approximately ¼ million shopping carts and baskets per year.

The Rehrig facility maintained an onsite wastewater treatment system to treat process water that contained nickel and chromium electroplating operations in an on-site wastewater treatment system. This system discharged treated water to the City of Richmond under a Pretreatment Permit issued and administered by the City of Richmond.

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Migration of Contaminated Groundwater Under Control" EI

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater" (for all groundwater "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, (GPRA). The "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated ground water and contaminants within groundwater (e.g., non-aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

Duration / Applicability of EI Determinations

El Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

2.	(i.e., ap	ndwater known or reasonably suspected to be "contaminated"; above appropriately protective "levels" plicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) eases subject to RCRA Corrective Action, anywhere at, or from, the facility?
		If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.
	X	If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting documentation to demonstrate that groundwater is not "contaminated."
		If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):

Two releases to the environment occurred at the site and were remediated to regulatory agency satisfaction.

- Hydraulic oil-contaminated soil was discovered during facility expansion activities and removed. This incident was
 closed to the satisfaction of the State Water Control Board and the Richmond Fire Department.
- Soil contamination below Virginia State Water Control Board reportable levels was detected during a 1989 diesel fuel UST removal activity

No evidence of other releases to soil or groundwater were found in files reviewed at VDEQ or USEPA Region III offices. No groundwater monitoring wells are known to have been installed at the site nor was groundwater encountered in 15-foot deep soil borings advanced in 1993. Therefore, groundwater quality is unknown. No groundwater wells were located within a three-mile radius of the site at the time of the 1989 Preliminary Assessment Report. The 1989 Preliminary Assessment Report indicated that groundwater contamination was not expected due to the plating tanks having concrete containment systems and the fact that all processes took place indoors.

Potable water is supplied to the former Rehrig site and surrounding area by the City of Richmond. The source of the water is the James River; the intake is approximately three miles upstream and southwest of the site.

"City of Richmond Ordinance Division 4 – Water Service Connections, Pipes, and Meters – Section 106-336 – Duties of Owners and Tenants" indicates that all newly constructed or existing buildings be connected to the public water service system. The Ordinance also notes that owners who have used another water supply system (for example, a well) that was installed and used prior to January 1, 1970 are not required to have a public water connection if it can be proven that the alternative water supply is not detrimental to public health and safety, as approved by the Richmond City Health District. The ordinance also states that a property owner is able to drill a new potable well provided the Richmond City Health District approves the well and water quality.

TtEC contacted the Richmond City Health District for clarification of this ordinance. An environmental inspector indicated that 98 percent of the City of Richmond is served by municipal water (the vicinity of the site is included in this 98 percent) and that the District does not approve wells for potable use. The inspector reported that if there are any wells in the vicinity of the site, they are for irrigation purposes only.

Footnotes:

"Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriate "levels" (appropriate for the protection of the groundwater resource and its beneficial uses).

3.	remain	e migration of contaminated groundwater stabilized (such that contaminated groundwater is expected to within "existing area of contaminated groundwater" as defined by the monitoring locations designated at e of this determination)?
		If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater sampling/measurement/migration barrier data) and rationale why contaminated groundwater is expected to remain within the (horizontal or vertical) dimensions of the "existing area of groundwater contamination"2).
		If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the "existing area of groundwater contamination"2) – skip to #8 and enter "NO" status code, after providing an explanation.
		If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):

² "existing area of contaminated groundwater" is an area (with horizontal and vertical dimensions) that has been verifiably demonstrated to contain all relevant groundwater contamination for this determination, and is defined by designated (monitoring) locations proximate to the outer perimeter of "contamination" that can and will be sampled/tested in the future to physically verify that all "contaminated" groundwater remains within this area, and that the further migration of "contaminated" groundwater is not occurring. Reasonable allowances in the proximity of the monitoring locations are permissible to incorporate formal remedy decisions (i.e., including public participation) allowing a limited area for natural attenuation.

4.	4.	Does "contaminated" groundwater discharge into surface water bodies?		
			If yes - continue after identifying potentially affected surface water bodies.	
			If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies.	
			If unknown - skip to #8 and enter "IN" status code.	
Ra	tiona	le and Re	eference(s):	

5.	Is the discharge of "contaminated" groundwater into surface water likely to be "insignificant" (i.e., the maximu concentration ³ of each contaminant discharging into surface water is less than 10 times their appropria groundwater "level," and there are no other conditions (e.g., the nature, and number, of discharging contaminant or environmental setting), which significantly increase the potential for unacceptable impacts to surface water sediments, or eco-systems at these concentrations)?		
		If yes - skip to #7 (and enter "YE" status code in #8 if #7 = yes), after documenting: 1) the maximum known or reasonably suspected concentrations of key contaminants discharged above their groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) provide a statement of professional judgment/explanation (or reference documentation) supporting that the discharge of groundwater contaminants into the surface water is not anticipated to have unacceptable impacts to the receiving surface water, sediments, or eco-system.	
		If no - (the discharge of "contaminated" groundwater into surface water is potentially significant) - continue after documenting: 1) the maximum known or reasonably suspected concentrations of each contaminant discharged above its groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) for any contaminants discharging into surface water in concentrations greater than 100 times their appropriate groundwater "levels," the estimated total amount (mass in kg/yr) of each of these contaminants that are being discharged (loaded) into the surface water body (at the time of the determination), and identify if there is evidence that the amount of discharging contaminants is increasing.	
		If unknown - enter "IN" status code in #8.	
Dationa	lo and Da	eforance(c):	

Rationale and Reference(s):

³ As measured in groundwater prior to entry to the groundwater-surface water/sediment interaction (e.g., hyporheic) zone.

6.	Can the discharge of "contaminated" groundwater into surface water be shown to be " currently acceptable " (i.e., not cause impacts to surface water, sediments or eco-systems that should not be allowed to continue until a final remedy decision can be made and implemented ₄)?			
		If yes - continue after either: 1) identifying the Final Remedy decision incorporating these conditions, or other site-specific criteria (developed for the protection of the site's surface water, sediments, and eco-systems), and referencing supporting documentation demonstrating that these criteria are not exceeded by the discharging groundwater; OR		
		2) providing or referencing an interim-assessment ₅ , appropriate to the potential for impact that shows the discharge of groundwater contaminants into the surface water is (in the opinion of a trained specialists, including ecologist) adequately protective of receiving surface water, sediments, and eco-systems, until such time when a full assessment and final remedy decision can be made. Factors which should be considered in the interim-assessment (where appropriate to help identify the impact associated with discharging groundwater) include: surface water body size, flow, use/classification/habitats and contaminant loading limits, other sources of surface water/sediment contamination, surface water and sediment sample results and comparisons to available and appropriate surface water and sediment "levels," as well as any other factors, such as effects on ecological receptors (e.g., via bio-assays/benthic surveys or site-specific ecological Risk Assessments), that the overseeing regulatory agency would deem appropriate for making the EI determination.		
		If no - (the discharge of "contaminated" groundwater can not be shown to be "currently acceptable") - skip to #8 and enter "NO" status code, after documenting the currently unacceptable impacts to the surface water body, sediments, and/or eco-systems.		
		If unknown - skip to 8 and enter "IN" status code.		
Ration	ale and I	Reference(s):		
Note pprop	, because	areas of inflowing groundwater can be critical habitats (e.g., nurseries or thermal refugia) for many species, scialist (e.g., ecologist) should be included in management decisions that could eliminate these areas by		

- significantly altering or reversing groundwater flow pathways near surface water bodies.
- 5 The understanding of the impacts of contaminated groundwater discharges into surface water bodies is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration to be reasonably certain that discharges are not causing currently unacceptable impacts to the surface waters, sediments or eco-systems.

7.	Will groundwater monitoring / measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater?"				
		If yes - continue after providing or citing documentation for planned activities or future sampling/measurement events. Specifically identify the well/measurement locations, which will be tested in the future to verify the expectation (identified in #3) that groundwater contamination will not be migrating horizontally (or vertically, as necessary) beyond the "existing area of groundwater contamination."			
		If no - enter "NO" status code in #8.			
		If unknown - enter "IN" status code in #8.			
D -4!	. I I D				

Rationale and Reference(s):

		Environmental Indicator (EI) RCRIS code (CA750)
8.	(event code CA	opriate RCRIS status codes for the Migration of Contaminated Groundwater Under Control EI 750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination opropriate supporting documentation as well as a map of the facility).
	X	YE - Yes, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the Former Rehrig International facility, EPA ID # VAD 089 028 377, located at 901 North Lombardy Street, in Richmond, Virginia. Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater" This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.
		NO - Unacceptable migration of contaminated groundwater is observed or expected.
		IN - More information is needed to make a determination.
	Completed by Supervisor	(signature) (print) DRNIS ZIELINSKI (title) SPNICE RESS (signature) (print) Aus Fuero (title) Assaiste Helber, Isole Choner's Division (EPA Region or State)
		(EPA Region or State) Region III
Location	ons where Reference	ces may be found:
	US EPA Region	III

US EPA Region III Waste & Chemicals Management Division 1650 Arch Street Philadelphia, PA 19103

Contact telephone and e-mail numbers

(name) Denis M. Zielinski (phone #) 215-814-3431 (e-mail) zielinski.denis@epa.gov

Section 3

RCRA Site Visit Report



March 26, 2007

Denis Zielinski United States Environmental Protection Agency Region III 1650 Arch Street Mail Code 3WC23 Philadelphia, PA 19103-2029

SUBJECT: FINAL RCRA CORRECTIVE ACTION SITE VISIT REPORT USACE CONTRACT NO. W912BU-04-D-0001 TASK ORDER NO. 0004

Please find enclosed one paper copy and one electronic copy on CD Rom of the Final RCRA Site Visit Report for the following facility:

Former Rehrig International, 901 North Lombardy Street, Richmond, VA 23220 USEPA ID # VAD 089 028 377

Please contact me at (215) 702-4023 with any questions or concerns.

Sincerely,

Jonathan Dziekan TtEC Project Manager

Enclosures

Cc: Mr. Richard Criqui (VDEQ – 2 copies)

Mr. Michael Mohn (USACE) Mr. Barry Shelley (Pro Chem) Ms. Wendy DeMaio (TtEC)



United States Environmental Protection Agency, Region III Corrective Action Program

FINAL RCRA SITE VISIT REPORT

Former Rehrig International Facility USEPA ID # VAD 089 028 377 901 North Lombardy Street Richmond, Virginia 23220

Prepared for:



United States Environmental Protection Agency Region III 1650 Arch Street Philadelphia, PA 19103-4431 Virginia Department of Environmental Quality 629 East Main Street Richmond, VA 23219



Prepared by:

Tetra Tech EC, Inc. Bucks Town Corporate Campus 820 Town Center Drive, Suite 100 Langhorne, PA 19047

March 2007

This RCRA SITE VISIT REPORT (Final) incorporates USEPA, VDEQ and facility representative comments to a DRAFT FINAL Report and has been prepared by:

apanne Clarke	3/26/07
Roxanne Clarke	Date
Environmental Engineer	
Tetra Tech EC, Inc.	
The report was approved by:	
J. S. J.	3/26/07
Jonathan Dziekan, EIT	Date
Project Manager	
Tetra Tech EC, Inc.	

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Appendix A – Site Visit Photographs

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RCRA SITE VISIT REPORT

Rehrig International VAD 089 028 377 901 North Lombardy Street Richmond, Virginia 23220

1.0 PURPOSE

The purpose of this site report is to consolidate relevant information from Rehrig International (Rehrig) regarding the facility associated with United States Environmental Protection Agency (USEPA) ID Number VAD 089028377. This information will be used to augment the existing facility information.

2.0 DOCUMENTATION REVIEW

Prior to the meeting, Mr. Jonathan Dziekan of Tetra Tech EC, Inc. (TtEC) conducted a review of files on record at the Commonwealth of Virginia Department of Environmental Quality (VDEQ) Central Office in Richmond, Virginia. A similar file review was conducted at the USEPA Region III office in Philadelphia, Pennsylvania. Files from the regional office of VDEQ Piedmont (Tidewater) were provided to TtEC after the site visit. The purpose of this review was to identify known Areas of Concern (AOCs) and Solid Waste Management Units (SWMUs) at the former Rehrig International facility prior to conducting a site visit.

3.0 SITE VISIT

An onsite meeting and a site visit were conducted on November 29, 2006 to discuss the former Rehrig facility located at 901 North Lombardy Street in Richmond, Virginia. A list of attendees at that site visit is as follows:

Name	Company/Agency	Telephone	E-mail Address
		Number	
Roxanne	TtEC	215-702-4003	Roxanne.Clarke@tteci.com
Clarke			
Jonathan	TtEC	215-702-4023	Jonathan.Dziekan@tteci.com
Dziekan			
Matthew	VDEQ	804-698-4026	mmstepien@deq.virginia.gov
Stepien			
Clint Shettle	VDEQ	804-527-5032	ctshettle@deq.virginia.gov
Denis	USEPA Region III	215-814-3431	zielinski.denis@epa.gov
Zielinski			
Barry	Pro Chem (consultant	540-268-9884	bshelley@prochemweb.com
Shelley	representing Rehrig)		
Patrick	Pro Chem (consultant	804-743-9600	pdavis@prochemweb.com
Davis	representing Rehrig)		

4.0 MEETING SUMMARY

A meeting at the former Rehrig International facility was held with the attendees noted above on November 29, 2006. Mr. Denis Zielinski, USEPA Region III Resource Conservation and Recovery Act (RCRA) Project Manager, presented the facility with information regarding USEPA Region III's Corrective Action process, the Environmental Indicator Assessment Program, 20/20 Vision, the facility Lead Program, and the policy driving this program.

Mr. Zielinski also discussed Virginia's Brownfields Program in addition to the Virginia Clean Water Revolving Loan fund. The fund allows for the acquisition of low interest Brownfield loans for corrective actions that remediate or protect surface or if groundwater in the Commonwealth of Virginia.

Under this investigation, USEPA Region III is focusing on two interim Environmental Indicators to evaluate whether any unacceptable risk to human health and the environment is ongoing at the facility. The two indicators are determining if human exposures are controlled and if groundwater releases are controlled.

The Facility Lead Program, as described by Mr. Zielinski allows facilities under RCRA Corrective Action to proactively implement measures that resolve Corrective Action Items without a Corrective Action Order or Permit. The Facility Lead Program eliminates administrative burdens and expedites the resolution of Corrective Action Items.

The site visit continued with a brief description of the former facility's activities and corrective actions provided by Mr. Barry Shelley of Pro Chem (Rehrig's consultant). No photographs of specific SWMU areas were taken as the facility has been demolished and a Krogers grocery store and small retail shops were constructed in its place. However, photographs of the general property conditions were taken. Neither the Krogers grocery store nor the small retail shops were toured as part of the site visit. Photographs of the current conditions can be found in Appendix A.

5.0 LOCATION, SUMMARY OF OPERATIONAL AND MANAGEMENT HISTORY, AND DESCRIPTION OF WASTES GENERATED AT THE FACILITY

The former Rehrig facility is located at 901 North Lombardy Street, Richmond, Virginia. Figure 1, located in Appendix B of this report, provides the Site Location Map. Figure 2, located in Appendix B of this report, provides the Site Layout Map for the facility. Figures 3 and 4 provide Building Layout Maps. The site is located in an urban commercial, industrial, and residential area.

According to the City of Richmond property report, the site address is also known as:

- 630 Bowe Street
- 800 Bowe Street

The current owner is Kroger Real Estate Department of Roanoke, Virginia.

The first known facility structure was a single building constructed in 1904 by the Export Leaf Tobacco Company and was used for tobacco leaf storage until 1977. Bowe Street Associates purchased the property in 1977. The property remained vacant until 1979 when Rehrig leased a portion of the onsite building.

According to the 1993 Environmental Site Assessment Update Report, the State Penitentiary, a book binding business, and an air filter products manufacturer also historically occupied the site. Previous owners were listed as the Broad Street Associates, who purchased the property in May 2002 and New River Real Estate who purchased the property in June 2003.

The Rehrig facility was approximately 250,000 square feet in size. Rehrig manufactured grocery shopping carts and shopping baskets at the site from 1979 to 2000. According to the 1993 Environmental Site Assessment Update Report, the manufacturing process consisted of metal fabrication, injection molding that produced high-density polyethylene (HDPE) parts, and metal plating of nickel and chromium onto the metal parts of the shopping carts (a new plating system was installed in 1993). Ancillary equipment used by Rehrig included a wastewater treatment system, diesel fuel Underground Storage Tank (UST), a waste oil Aboveground Storage Tank (AST), and a hydraulic oil AST. Rehrig plated and assembled approximately ¼ million shopping carts and baskets per year.

Three hazardous chemical storage areas were reportedly used at the site. Documents reviewed by TtEC provided conflicting information regarding the number of hazardous storage areas. This information is difficult to clarify as the Rehrig facility no longer exists and current Rehrig employees were unable to provide input during the November 29, 2006 site visit. Rehrig was a Large Quantity Generator (LQG) of hazardous waste.

The Rehrig facility provided treatment of the wastewater generated from the facility's nickel and chromium electroplating operations in an on-site wastewater treatment system. This wastewater treatment system included 4 stages of treatment in tanks, followed by waste treatment using a filter press to remove water from settled solids. Wastewater from the tanks and filter presses were discharged to the sanitary sewer system in accordance with a Pretreatment Permit issued and administered by the City of Richmond. This Permit was a requirement of the City's VPDES Municipal Wastewater Treatment Permit issued by the State Water Control Board and VDEQ.

The wastewater treatment sludge generated from the wastewater treatment system and filter presses was classified as a F006 listed waste code. The facility also generated acid waste and alkaline waste and these waste streams also carried the following characteristic waste codes; D002, D007, and D008.

A Compliance Order was issued by the Virginia Department of Health on December 26, 1984. The Virginia Department of Health found that Rehrig had not complied with financial requirements for hazardous waste management facilities in accordance with Virginia Hazardous Waste Management Regulations (VHWMR). Rehrig was required to provide documentation of compliance with these financial regulations by March 1, 1985.

A letter from the Virginia Department of Waste Management to Rehrig dated November 6, 1990 indicated that hazardous waste closure of the facility had been complete in accordance with the approved closure plan. It is not clear if this letter addressed all of the SWMUs.

A Virginia Waste Management Board Consent Order was issued on January 23, 1997 which described numerous violations observed during a July 11, 1996 VDEQ inspection. Violations included administrative items (manifest issues, no job titles for employees who manage hazardous waste, and failure to maintain tank assessment records) and physical violations (failure to keep all containers of hazardous waste closed, storage of incompatible materials, and improper secondary containment).

After several discussions between VDEQ and Rehrig, the facility entered into the January 1997 Order voluntarily. The Order indicated that violations were to be corrected in 90 days. A May 15, 1998 letter from VDEQ to Rehrig indicated that the facility met the terms of the Order and that the Order had been terminated.

In 2001, Rehrig pleaded guilty to criminal violations of the Clean Water Act and was ordered to pay \$500,000 for fines, implement pollution prevention improvements at its plant and perform a community service contribution.

Rehrig operated a wastewater treatment facility under a Pretreatment Permit issued by the City of Richmond; the wastewater discharge from this system was administered and regulated under the City's Municipal VPDES Permit. Rehrig admitted in its plea that in 1998, the company violated its permit numerous times by discharging excessive amounts of nickel and chromium (up to 30 times its permitted limits). The city issued Rehrig several citations, and in December 1998 found Rehrig in significant noncompliance with its permit. In early 1999, Rehrig agreed to improve its water treatment system.

According to a Water Tech Online internet article (http://www.waternet.com/news.asp?mode=4&N_ID=23614), Rehrig pleaded guilty to criminal violations of the Clean Water Act in June 2001 in US District Court here and was sentenced to pay \$500,000 for fines, pollution prevention improvements at its plant, and a community service contribution.

Just prior to this plea, a Rehrig employee was sentenced to six months of home confinement, with weekends in jail for 120 days, and ordered to pay a fine of \$7,500 after he pleaded guilty to a related Clean Water Act offense. He was also required to give three speeches on the importance of Clean Water Act compliance to industry managers.

Rehrig admitted that it violated its permit numerous times in 1998 by discharging excessive amounts of nickel and chromium. The City issued Rehrig several citations, and in December 1998 found Rehrig in significant noncompliance with its permit. In early 1999, Rehrig pledged to dedicate additional resources to wastewater treatment and promised to improve the supervision of its wastewater treatment operators.

However, Rehrig continued to periodically violate its permit, according to USEPA officials. At this time, Rehrig began moving its operations to a new site in neighboring Chesterfield County, Virginia.

On June 10, 1999, Rehrig discharged chromium into city sewers in amounts approximately 30 times the permit limits, and nickel in amounts six times the permit limits.

The company later acknowledged that this discharge occurred as the result of lack of staff resources, according to USEPA documents. In late September 1999, after additional permit violations by Rehrig and additional citations by the City of Richmond, Rehrig's discharges violated its permit on each of five consecutive days.

After Rehrig pleaded guilty to two criminal misdemeanors, the company was fined \$200,000, ordered to make a \$290,000 payment for adding pollution prevention/control equipment at its new plant (Chesterfield County facility), and ordered to make a \$10,000 contribution to the James River Advisory Council, a group formed to protect the river flowing through Richmond. Rehrig was also required to submit to the court an environmental compliance program, and its employees were required to perform 400 hours of community service.

Subsequently, Rehrig replaced its plating manager, plant manager, and vice president for production. Rehrig then contracted with an environmental consulting firm to perform wastewater treatment, and operated in compliance with its Chesterfield County Clean Water Act permit.

A September 23, 2003 Internal VDEQ Memorandum described an unannounced compliance inspection that was conducted on September 10, 2003. The Memorandum noted the site was turned over to Kroger, which planned to open a grocery store at the site in October 2003. The Memorandum requested the Office of Waste Programs to deactivate the VAD identification number, as Rehrig no longer occupied the site.

Photographs 1 through 5 found in Appendix A of this report show the condition of the site at the time of the September 29, 2006 Site Visit.

5.1 Area Geology and Hydrogeology

Geology

According to the 1989 Preliminary Assessment Report, the Rehrig facility is located in the Fall Zone between the Piedmont and Coastal Plain Physiographic Providences. This is a transitional zone up to 10 miles wide where thin, younger Coastal Plain sediments begin to cover the Older Piedmont rocks.

The basement rock for this area is the Petersburg granite. In the Fall Zone, the Petersburg is overlain by Miocene marine transgressive sediments or younger Tertiary-Quaternary regressive sediments or both. Transgressive sediments are described as drab-gray, bluish-gray, and greenish-gray silts, clays, and silty clays commonly well consolidated with some plant fragments

and occasional shell beds. Regressive sediments are light to bright colored oxidized sediments, mainly sands and gravels with some clay.

Several borings (hand auger and test borings) were advanced in 1993 as part of an Environmental Site Assessment investigation. The following table summarizes the site-specific geology observed.

Boring	Depth	Soil Description
B-1	0 to 6 feet	Red-brown fat clay with sand fill, trace gravel, and brown
		fine to coarse poorly graded sand fill
	6 to 15 feet	Brown fine to medium sandy lean clay
B-2	0 to 6 feet	Brown and black fine to medium sandy lean clay fill,
		gravel, and asphalt
	6 to 15 feet	Brown, red, and gray fine sandy lean clay
HA-1	0 to 3.5 feet	Brown and red fine to coarse sandy lean clay fill with
		trace gravel
HA-2	0 to 1.5 feet	Gray crushed stone fill beneath concrete and red brown
		lean clay with trace sand
HA-3	0 to 1.5 feet	Gray crushed stone fill beneath concrete and yellow to
		brown fine to medium poorly graded sand, probable fill
HA-4	0 to 1 foot	Gray crushed stone fill beneath concrete and stone fill.
		Auger terminated due to second concrete slab
HA-5	0 to 1 foot	Brown lean clay with sand and red-brown fine to medium
		clayey sand
HA-6	0 to 1.2 feet	Red brown fine to medium clayey sand

Hydrology and Hydrogeology

Groundwater quality within the Fall Zone is generally good except for some areas where high iron concentration poses a problem. According to the 1989 Preliminary Assessment, pumping rates up to 10 gallons per minute (gpm) are common with rates of 100 gpm possible. Most wells in the Fall Zone are drilled through the thin Coastal Plain deposits and are completed in the underlying bedrock.

No groundwater monitoring wells were known to be installed at the site; therefore site-specific information is not available.

5.2 Wastes Generated at the Facility

The following waste streams were historically generated by Rehrig according to a November 17, 1998 VDEQ Survey Sheet for Inspection of Hazardous Waste Facilities:

- Sludge from nickel plating process (F006, D007)
- Waste acid (D002, D007)
- Waste alkaline (D002, D007, D008)

According to a 1997 Consent Order, the waste generated was stabilized waste sludge from the nickel trichrome plating process.

Muriatic acid with a pH of 1 to 2 (excluded from waste regulations) was treated neutralized and discharged to the sanitary sewer system under the facility's Pretreatment Permit issued by the City of Richmond.

The property is now the site of a Krogers grocery store and several small retail shops and generates no hazardous waste.

6.0 DESCRIPTION OF AOCS AND SWMUS

6.1 SWMU #1 - Bays A1, A2, A3, A4, A5, A6, B1, B2, B3, B4, B5, B6, B7, and B8

This unit received wastewater from the chrome plating operation and removed metals from the nickel chrome plating operation (pretreatment). The bays were located on the northwestern side of the building. The following summarizes the sizes and first dates of use of these bays:

Bay Number	First Date of Use	Size (square feet)			
A1	July 1, 1979 - February 1, 1980	None provided			
A2	February 1, 1980 - May 1, 1983	9,335			
A3	May 1, 1982 - July 1, 1983	9,335			
A4	July 1, 1983	8,840			
A5	July 1, 1983	8,755			
A6	July 1, 1983	8,840			
B1	July 1, 1979 - February 1, 1980				
B2	July 1, 1979 - February 1, 1980	Total of 41,444			
В3	July 1, 1979 - February 1, 1980				
B4	July 1, 1983	8,431			
B5	July 1, 1983	8,431			
B6	July 1, 1983	8,431			
B7	July 1, 1983	8,323			
B8	July 1, 1983	8,323			

According to a letter from Rehrig to USEPA Region III dated May 20, 1986, this SWMU was a specially lined pit. The water was pumped from this unit through a series of lined tanks. The last tank had a baffle for collecting sludge. Following the last tank, water was then pumped through a filter press. The capacity of this unit was 30 gpm. The annual quantity of wastewater processed by this unit was estimated to be 650,000 (4.86 million gallons) cubic feet per year.

Pro Chem representatives indicated during the November 29, 2006 site visit that this SWMU was actually a group of fiberglass aboveground tanks/baths. The bay numbers are related to the plating lines from which the baths received liquid. A January 31, 1997 letter from CTI Consultants to Rehrig noted that five fiberglass tanks were visually examined and found to be in satisfactory condition an that they could be put into immediate service. A letter from VDEQ to Rehrig dated January 14, 1997 indicated that an epoxy-coated berm and leak detection systems were to be installed for these tanks. It is unclear if these five tanks were new at the time of the correspondence, or if they are included in the group of previously used tanks. A November 17, 1998 Hazardous Waste Management Compliance Inspection Report noted that these five tanks were of the following capacities:

- Two 3,300-gallon
- One 4,200-gallon
- Two 5,000-gallon

No closure plan was found in USEPA or VDEQ files, however, a letter from VDEQ to Rehrig dated March 24, 2989 indicated that a closure plan was submitted to the Virginia Department of Waste Management on February 28, 1989. The Virginia Department of Waste Management conducted a compliance inspection of the facility's operations on November 1, 1990 according to a November 6, 1990 letter to Rehrig. This letter provided the VDEQ's approval of closure of the hazardous waste management facility under Interim Status and documented that the facility was "closed" in accordance with the approved closure plan and the "certifications" of closure provided by Rehrig. This letter did not list specific SWMUs covered by this closure plan or the November 6, 1990 letter.

No evidence of a spill or release was found at the site visit or in the files reviewed at the VDEQ or USEPA Region III offices.

6.2 SWMU #2 - #1 and #2 Filter Press

Rehrig operated two Filter Press units, each with a capacity of 1,500 pounds. According to files reviewed by TtEC, this equipment was active as of 1996. Pro Chem representatives reported during the November 29, 2006 site visit, that these filter presses were cleaned, dismantled, and sold for scrap.

No closure plan was found in USEPA or VDEQ files, however, a letter from VDEQ to Rehrig dated March 24, 2989 indicated that a closure plan was submitted to the Virginia Department of Waste Management on February 28, 1989. The Virginia Department of Waste Management conducted a compliance inspection of the facility's operations on November 1, 1990 according to a November 6, 1990 letter to Rehrig. This letter provided the VDEQ's approval of closure of the hazardous waste management facility under Interim Status and documented that the facility was "closed" in accordance with the approved closure plan and the "certifications" of closure provided by Rehrig. This letter did not list specific SWMUs covered by this closure plan or the November 6, 1990 letter.

No evidence of a spill or release was found at the site visit or in the files reviewed at the VDEQ or USEPA Region III offices.

6.3 SWMU #3 - Two Less Than 90-Day Accumulation Area

Rehrig operated two less than 90-day accumulation areas that held the waste from the two Filter Press units (SWMU #2). According to files reviewed by TtEC, these units were active in 1996. The 1993 Environmental Site Assessment Update Report noted that there was only one hazardous waste storage area. No additional information was provided.

No closure plan was found in USEPA or VDEQ files, however, a letter from VDEQ to Rehrig dated March 24, 2989 indicated that a closure plan was submitted to the Virginia Department of Waste Management on February 28, 1989. The Virginia Department of Waste Management conducted a compliance inspection of the facility's operations on November 1, 1990 according to a November 6, 1990 letter to Rehrig. This letter provided the VDEQ's approval of closure of the hazardous waste management facility under Interim Status and documented that the facility was "closed" in accordance with the approved closure plan and the "certifications" of closure provided by Rehrig. This letter did not list specific SWMUs covered by this closure plan or the November 6, 1990 letter.

No evidence of a spill or release was found at the site visit or in the files reviewed at the VDEQ or USEPA Region III offices.

6.4 SWMU #4 - Drum Storage Area

According to the 1989 Preliminary Assessment, this area was located near the loading dock. It was a concrete pad where full drums of dried nickel plating sludge, filter press cake, and metal chips scraped off metal parts holders were stored until they were removed from the site for disposal at a Treatment, Storage, Disposal Facility (TSDF). The concrete pad was fenced and secured with a lock at the time of the 1989 Preliminary Assessment. Approximately 80 drums were observed in this area during a March 16, 1989 RCRA inspection, which served as the last inspection prior the 1989 Preliminary Assessment being issued.

The 1989 Preliminary Assessment Report indicated that a closure plan was submitted to the Department of Waste Management. A letter from Rehrig to the Department of Waste Management dated October 19, 1990 provided certification statements for the closure of a containment slab. TtEC assumes that this letter refers to SWMU #4. Neither USEPA nor VDEQ files contained a closure plan for this unit.

No evidence of a spill or release was found at the site visit or in the files reviewed at the VDEQ or USEPA Region III offices.

6.5 SWMU #5 - Nickel Plating Sludge Drying Drum

The 1989 Preliminary Assessment Report identified this unit as SWMU #1, which was located next to the nickel plating tank. As the nickel dropped out of the plating solution, it accumulated

on the bottom the tank as sludge. Once per week, the sludge was removed and placed in this drum to dry.

No closure plan was found in USEPA or VDEQ files, however, a letter from VDEQ to Rehrig dated March 24, 2989 indicated that a closure plan was submitted to the Virginia Department of Waste Management on February 28, 1989. The Virginia Department of Waste Management conducted a compliance inspection of the facility's operations on November 1, 1990 according to a November 6, 1990 letter to Rehrig. This letter provided the VDEQ's approval of closure of the hazardous waste management facility under Interim Status and documented that the facility was "closed" in accordance with the approved closure plan and the "certifications" of closure provided by Rehrig. This letter did not list specific SWMUs covered by this closure plan or the November 6, 1990 letter.

No evidence of a spill or release was found at the site visit or in the files reviewed at the VDEQ or USEPA Region III offices.

6.6 SWMU #6 - Filter Press Cake Bin

This SWMU is listed as SWMU #2 in the 1989 Preliminary Assessment Report. The Filter Press Cake Bin was located underneath the filter press at the end of the wastewater treatment process. It was a catch basin for the pressed filter cake that was generated by the filter press according to the 1989 Preliminary Assessment Report.

When the filter press reached its capacity, the filter press cake was removed by scraping it off the filters into a catch basin directly beneath the press. The cake was then stored in SWMU #3 prior to disposal.

No closure plan was found in USEPA or VDEQ files, however, a letter from VDEQ to Rehrig dated March 24, 2989 indicated that a closure plan was submitted to the Virginia Department of Waste Management on February 28, 1989. The Virginia Department of Waste Management conducted a compliance inspection of the facility's operations on November 1, 1990 according to a November 6, 1990 letter to Rehrig. This letter provided the VDEQ's approval of closure of the hazardous waste management facility under Interim Status and documented that the facility was "closed" in accordance with the approved closure plan and the "certifications" of closure provided by Rehrig. This letter did not list specific SWMUs covered by this closure plan or the November 6, 1990 letter.

No evidence of a spill or release was found at the site visit or in the files reviewed at the VDEQ or USEPA Region III offices.

6.7 SWMU #7 - 55-Gallon Storage Drum

According to the 1989 Preliminary Assessment Report, this SWMU (labeled as SWMU #3 in the 1989 Preliminary Assessment Report) was located near the filter press catch basin and contained nickel plating sludge, filter press cake, and any metal chips that were scraped off the metal parts holder. Layers of an absorbent material were also placed in this drum to prevent leaks.

No closure plan was found in USEPA or VDEQ files, however, a letter from VDEQ to Rehrig dated March 24, 2989 indicated that a closure plan was submitted to the Virginia Department of Waste Management on February 28, 1989. The Virginia Department of Waste Management conducted a compliance inspection of the facility's operations on November 1, 1990 according to a November 6, 1990 letter to Rehrig. This letter provided the VDEQ's approval of closure of the hazardous waste management facility under Interim Status and documented that the facility was "closed" in accordance with the approved closure plan and the "certifications" of closure provided by Rehrig. This letter did not list specific SWMUs covered by this closure plan or the November 6, 1990 letter.

No evidence of a spill or release was found at the site visit or in the files reviewed at the VDEQ or USEPA Region III offices.

6.8 SWMU #8 - Wastewater Treatment System

The wastewater from the plating process underwent four stages of treatment. In the first stage, wastewater pH was adjusted with lime to between 8.5 and 10. In the second stage, a flocculent was added, and in the third stage, a coagulating agent was added. The treated wastewater was then sent to a settling tank (partially below ground based on 1993 Environmental Site Assessment Update Report); it was then processed through a filter press to remove solids. Once treatment was complete, the water was discharged to the POTW through the City of Richmond sewer system.

No closure plan was found in USEPA or VDEQ files, however, a letter from VDEQ to Rehrig dated March 24, 2989 indicated that a closure plan was submitted to the Virginia Department of Waste Management on February 28, 1989. The Virginia Department of Waste Management conducted a compliance inspection of the facility's operations on November 1, 1990 according to a November 6, 1990 letter to Rehrig. This letter provided the VDEQ's approval of closure of the hazardous waste management facility under Interim Status and documented that the facility was "closed" in accordance with the approved closure plan and the "certifications" of closure provided by Rehrig. This letter did not list specific SWMUs covered by this closure plan or the November 6, 1990 letter.

No evidence of a spill or release was found at the site visit or in the files reviewed at the VDEQ or USEPA Region III offices.

6.9 SWMU #9 - Interim Status Storage Unit

On November 9, 1990, the Virginia Department of Waste Management provided the Rehrig facility with a copy of an October 15, 1990 Hazardous Waste Compliance Inspection. The Inspection Report indicated that the facility was in the process of closing an Interim Status Storage Unit. It is not clear if this SWMU is one of those described above.

No closure plan was found in USEPA or VDEQ files, however, a letter from VDEQ to Rehrig dated March 24, 2989 indicated that a closure plan was submitted to the Virginia Department of

Waste Management on February 28, 1989. The Virginia Department of Waste Management conducted a compliance inspection of the facility's operations on November 1, 1990 according to a November 6, 1990 letter to Rehrig. This letter provided the VDEQ's approval of closure of the hazardous waste management facility under Interim Status and documented that the facility was "closed" in accordance with the approved closure plan and the "certifications" of closure provided by Rehrig. This letter did not list specific SWMUs covered by this closure plan or the November 6, 1990 letter.

No evidence of a spill or release was found at the site visit or in the files reviewed at the VDEQ or USEPA Region III offices.

6.10 AOC #1 - Hydraulic Oil-Contaminated Soil

An April 26, 1993 Environmental Site Assessment Report prepared for Rehrig indicated that soil contaminated with hydraulic oil was removed in 1991. Approximately 2,336 cubic feet of soil was removed for offsite disposal. This contaminated soil was discovered during excavation activities taking place for an injection molding machine. Rehrig suspected that this contamination occurred prior to its occupation of the site. This incident was closed to the satisfaction of the State Water Control Board and the Richmond Fire Department.

No additional information was found in VDEQ or USEPA Region III files, or provided by facility representatives.

6.11 AOC #2 - Sodium Hydrosulfite Reaction

According to the 1993 Environmental Site Assessment Report, a chemical reaction occurred in December 1992. Sodium hydrosulfite, which was used in the wastewater treatment process (conducted indoors), was released to the concrete floor in the wastewater treatment process area. The material was swept up and placed in a 55-gallon drum. The drum contained some water, which reacted with the sodium hydrosulfite, resulting in smoke and fumes. No evidence was found in files reviewed indicating that the smoke or fumes left the building or site. The event was isolated to a 55-gallon drum trash container indoors. Oil dry was placed in the drum to stop the reaction. This incident was closed to the satisfaction of the State Water Control Board and the Richmond Fire Department.

No additional information was found in VDEQ or USEPA Region III files, or provided by facility representatives.

6.12 AOC #3: - Former Diesel Fuel Underground Storage Tank

A 1,000-gallon diesel fuel UST was removed from the site in April 1989 according to the 1993 Environmental Site Assessment Report. Soil samples collected during the removal activities contained low levels of petroleum hydrocarbon contamination. The levels were reported to be below the reportable level of 100 milligrams per kilograms (mg/kg) set by the State Water Control Board. No formal closure letter was issued by the State Water Control Board.

No additional information was found in VDEQ or USEPA Region III files, or provided by facility representatives.

7.0 DESCRIPTION OF EXPOSURE PATHWAYS FOR ALL RELEASES OR POTENTIAL RELEASES

7.1 Air

No information was found in USEPA or VDEQ files regarding air permits the facility historically maintained. No recorded or documented releases of contaminants to the environment nor odors at the Rehrig facility were identified in the documents reviewed, were confirmed by Pro Chem staff, or were noted during the site visit, except for the Sodium Hydrosulfite Reaction, which occurred in a drum indoors in December 1992. No evidence of complaints from residents or other surrounding properties was found in VDEQ or USEPA Region III offices. No evidence was found in files reviewed indicating that the smoke or fumes left the building or site. There is no hazard for a release of a hazardous waste to air as the site is now used for retail purposes.

The site is located in an urban commercial, industrial, and residential area. The closest residence is located approximately 500 feet away across Bowe Street to the northeast on West Leigh Street (Bowe Street bounds the Rehrig site to the southeast).

7.2 Surface Water

The nearest surface water body is the James River, which is located approximately 1.6 miles south of the former Rehrig facility. According to the 1989 Preliminary Assessment Report, all plating tanks had concrete containment systems. Runoff was diverted to the City of Richmond's POTW via stormwater/sewer system; therefore it could not reach the James River.

No evidence of releases to the James River was found in files reviewed at VDEQ or USEPA Region III offices.

7.3 Groundwater

According to the 1989 Preliminary Assessment Report, all plating tanks had concrete containment systems and that only runoff from the roof and sidewalks could reach groundwater via seepage; no processes took place outdoors. No groundwater wells were located within a three-mile radius of the site at the time of the 1989 Preliminary Assessment Report. No evidence of releases to groundwater was found in files reviewed at VDEQ or USEPA Region III offices.

No groundwater monitoring wells were known to be installed at the site, nor was groundwater encountered in soil borings (up to depth of 15 feet) or soil vapor points (no depth provided) advanced in 1993. Therefore, site-specific groundwater quality is not known.

7.4 Soil

Areas around manufacturing units were reported to have been located on concrete with containment systems.

Soil samples were collected from the plating operation and analyzed for pH, sulfates, total chromium, hexavalent chromium, and nickel in 1989. According the 1989 Phase II Study (summarized in the 1993 Environmental Site Assessment Update Report; no evidence of significant leakage from the plating area was found. The 1993 Environmental Site Assessment Update Report indicated that low pH and elevated sulfate concentrations may have been the result of a minor sulfuric acid spill. No soil remediation took place as a result of the 1989 investigation.

Five soil vapor samples were collected from the vicinity of the UST in 1989; no soil samples were collected. Photoionization device (PID) values ranged from 0 to 2.6 parts per million (ppm). The 1989 Phase II Study found no evidence of hydrocarbons in the pit surrounding the UST.

The 1993 Environmental Site Assessment Update Report noted that hydraulic oil-contaminated soil was removed from the site. Rehrig suspected that this contamination occurred prior to its occupation of the site. This incident was closed to the satisfaction of the State Water Control Board and the Richmond Fire Department.

Soil samples collected in 1993 contained nickel concentrations ranging from 3.9 to 66.5 ppm and chromium concentrations ranging from 13.5 to 116.3 ppm. The 1993 Environmental Site Assessment Update Report indicated that these constituents could be naturally occurring. One soil sample collected from the vicinity of the diesel fuel UST contained 39 ppm of Total Petroleum Hydrocarbons (TPH), which was less than the reporting value of 100 ppm (per the State Water Board). No soil remediation took place as a result of the 1993 investigation.

8.0 EXPOSURE PATHWAY CONTROLS AND RELEASE CONTROLS INSTITUTED AT THE FACILITY

8.1 Site Access

The site is now occupied by a Krogers grocery store and small retail shops. Access to the site is provided via several public drive ways into the parking lot.

8.2 Air

It is not clear if Rehrig maintained air permits for its operations. Raw hazardous chemicals and wastes are no longer stored at the facility; therefore there is no potential for a release to the atmosphere.

8.3 Surface Water

No information found in VDEQ or USEPA files indicate that the site operated under a Virginia Pollution Discharge Elimination System (VPDES) permit. Stormwater was discharged from the site to the City of Richmond's stormwater sewer system. The facility maintained a wastewater Pretreatment Permit, which allowed the discharge of wastewater to the City's sanitary sewer system. Raw hazardous chemicals and wastes are no longer stored at the facility; therefore there is no potential for a release to the surface water.

8.4 Groundwater

Potable water is supplied by the City of Richmond to the site and surrounding area (within a three miles radius according to the 1989 Preliminary Assessment Report). The source of the water is the James River; the intake was approximately three miles upstream and southwest of the site.

TtEC obtained a copy of City of Richmond Ordinance Division 4 – Water Service Connections, Pipes, and Meters – Section 106-336 – Duties of owners and tenants (provided in Appendix C of this report). This Ordinance indicates that all newly constructed or existing buildings shall be connected to the public water service system. It indicates that owners who have used another water supply system (for example, a well) that was installed and used prior to January 1, 1970 are not be required to have a public water connection if it can be proven that the alternative water supply is not detrimental to public health and safety, as approved by the Richmond City Health District. The ordinance also states that a property owner is able to drill a new potable well provided the Richmond City Health District approves the well and water quality.

TtEC contacted the Richmond City Health District for clarification of this ordinance. An environmental inspector indicated that 98 percent of the City of Richmond is served by municipal water (the vicinity of the site is included in this 98 percent) and that the District does not approve wells for potable use. The inspector reported that if there are any wells in the vicinity of the site, they are for irrigation purposes only.

The 1989 Preliminary Assessment Report indicated that groundwater contamination was not expected due to the plating tanks having concrete containment systems and the fact that all processes took place indoors.

8.5 Soil

The former Rehrig facility was constructed with concrete floors and containment systems. If a release occurred, the material was removed from the containment structures and treated in the wastewater treatment system.

9.0 FOLLOW-UP ACTION ITEMS

USEPA Region III will decide if additional information or sampling at the facility is required to determine whether the environmental indicators have been met or if corrective action is required by the facility.

The facility will determine if they would like to pursue RCRA Corrective Action utilizing the Facility Lead Program.

APPENDIX A SITE VISIT PHOTOGRAPHS



Photograph 1
View of retail stores on the former Rehrig property.



Photograph 2
View of Kroger Grocery Store on the former Rehrig property.



Photograph 3 View of adjacent property.

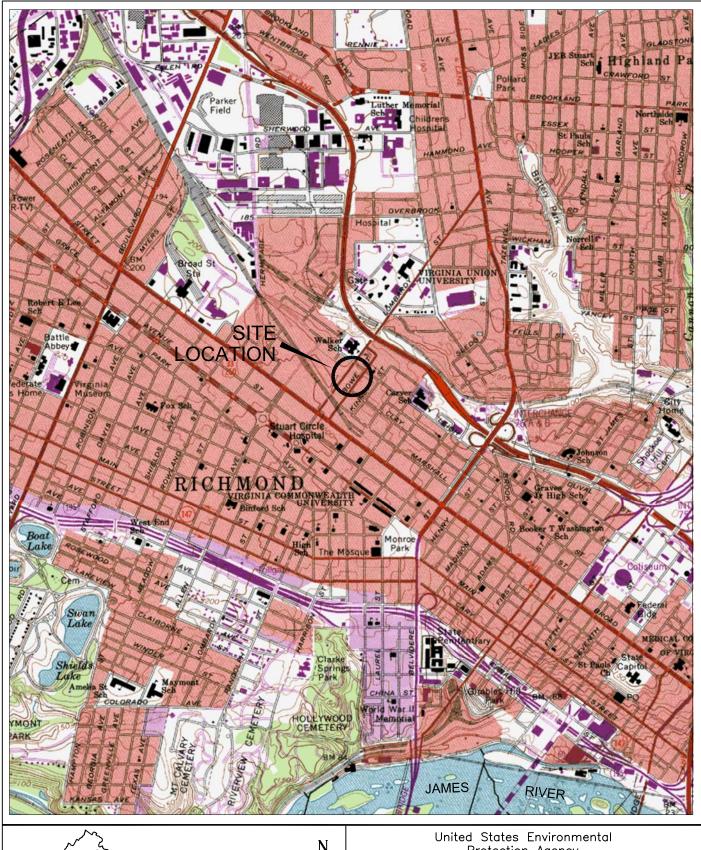


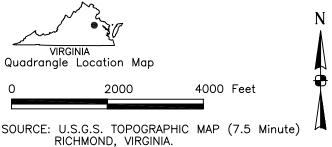
Photograph 4
View of retail stores on the former Rehrig property.



Photograph 5
View of Kroger Grocery Store on the former Rehrig property.

APPENDIX B SITE LOCATION AND LAYOUT MAPS





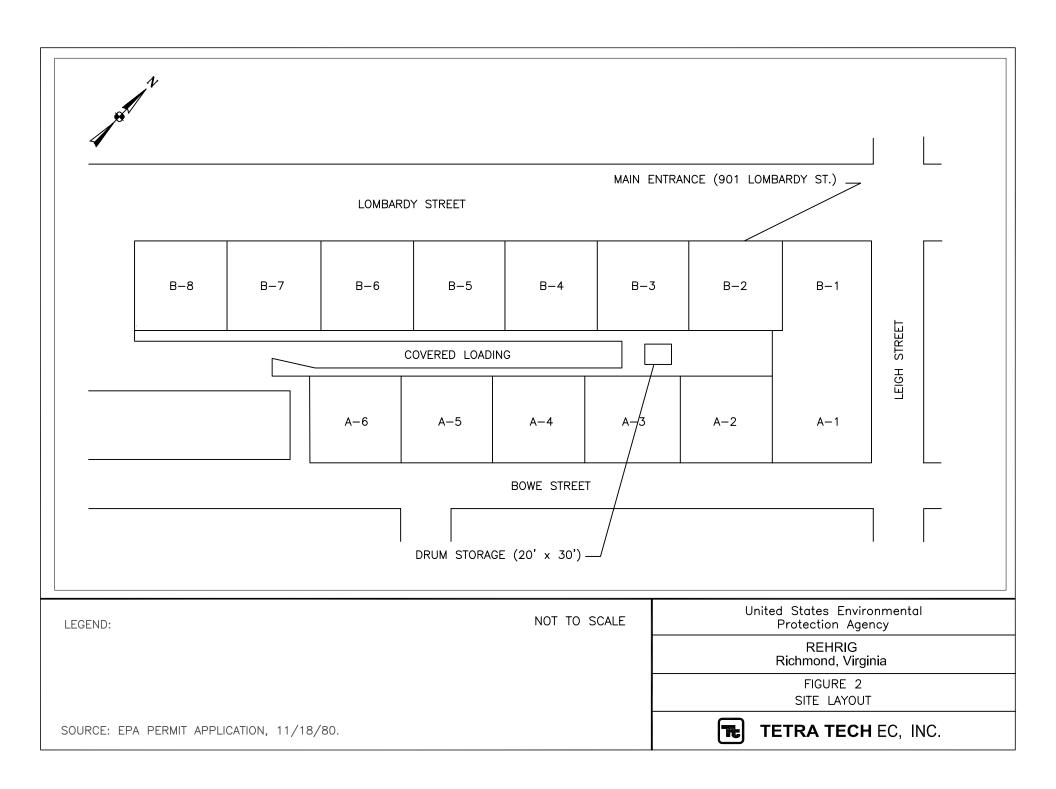
Protection Agency

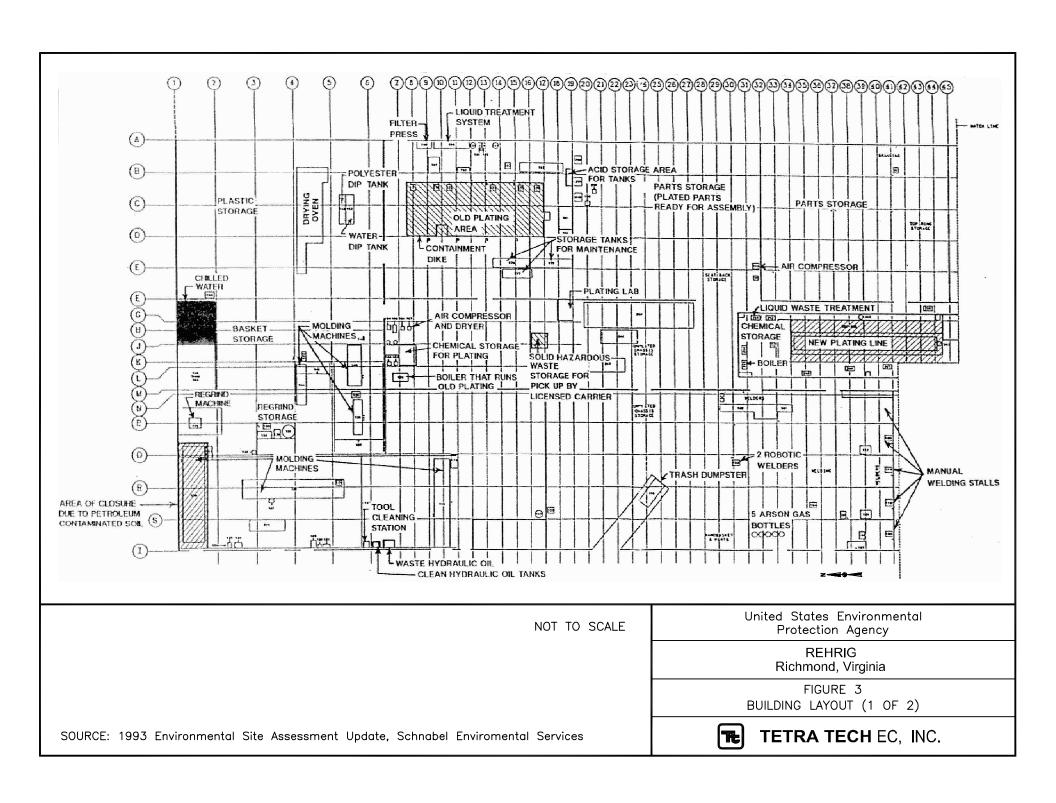
REHRIG Richmond, Virginia

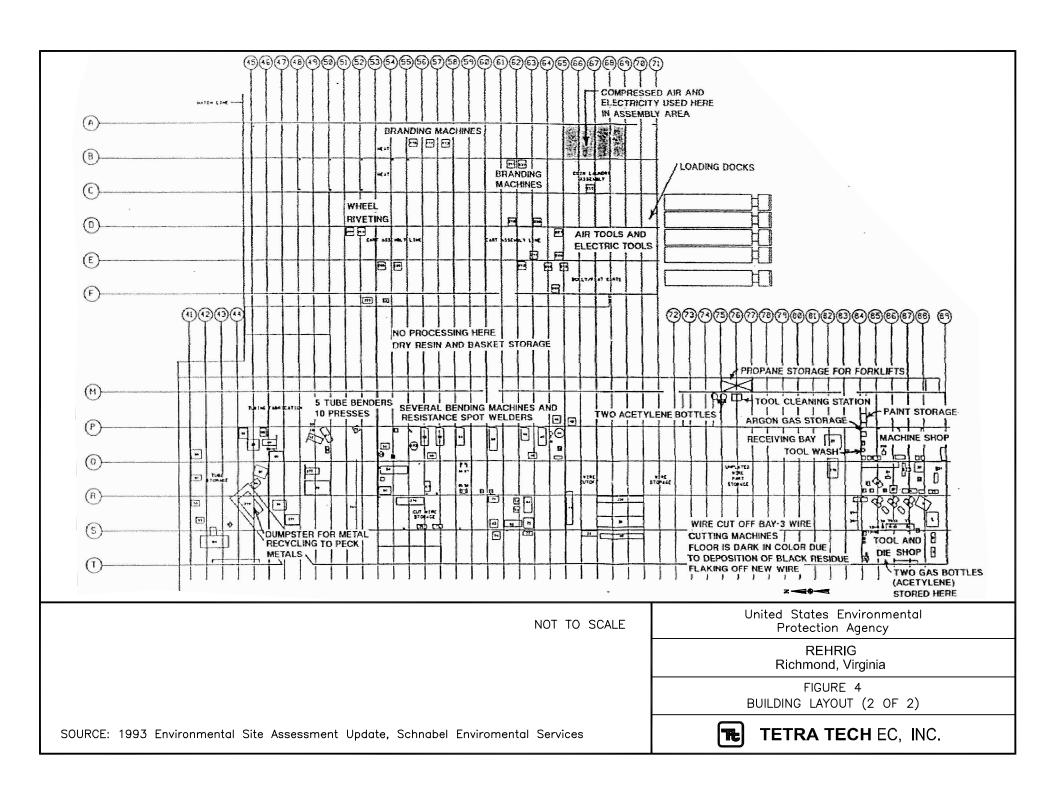
FIGURE 1 SITE LOCATION MAP



TETRA TECH EC, INC.







APPENDIX C INVENTORY OF DOCUMENTATION AND REFERENCE DOCUMENTS

Inventory of Documentation

November 14, 1980 Notification of Hazardous Waste Activity

Rehrig International gives written notification to the USEPA of

Hazardous Waste Activity.

November 19, 1980 USEPA forms completed by Rehrig International

General Information Form and Hazardous Waste Permit Application

January 21, 1981 Letter from USEPA to Rehrig International

Acknowledgement by the USEPA that Rehrig International has applied

for a hazardous waste permit.

August 5, 1981 Letter from USEPA to H.B.P. Associates

Processing of the hazardous waste permit is complete.

October 15, 1982 RCRA Inspection

On September 21, 1982 the Virginia State Health Department, Division

of Solid and Hazardous Waste Management conducted an inspection that

resulted in some violations.

April 21, 1986 Letter from Rehrig International to USEPA

Correspondence concurring extension to provide information.

May 20, 1986 Letter from Rehrig International to USEPA

Submittal of topographic map as well as history of the building, unit's

function, and description of solid waste.

July 1, 1986 Letter and Enclosure from Commonwealth of Virginia Department

of Waste Management to Rehrig International

Inspection checklists

July 26, 1986 Letter from Commonwealth of Virginia Department of Health to

Rehrig International

Compliance Order outlining findings, orders and stipulations.

July 30, 1986 RCRA Inspection

An RCRA inspection dated June 25, 1986 by Virginia's Department of

Waste Management found areas of non-compliance.

August 19, 1986 Internal Memo – US EPA Region III

Internal memo stating that action is going to be taken

regarding violations found during inspections.

October 8, 1986 RCRA Inspection

A re-inspection of the Rehrig facility on September 24, 1986 had made great improvements, but was still not in total compliance.

October 16, 1986 Internal Memo – US EPA Region III

Internal memo stating that action is going to be taken regarding violations found during inspections.

June 2, 1988 RCRA Inspection

After a RCRA inspection on December 8, 1987 the Rehrig facility was found to be in compliance with the Virginia Hazardous Waste Management Regulations.

March 24, 1989 Letter from Virginia Department of Waste Management to Rehrig International

The closure plan for the Rehrig facility was received by the Virginia Department of Waste Management on February 28, 1989.

August 2, 1989 Preliminary Assessment of Rehrig International

Preliminary Assessment of Rehrig International, prepared by Commonwealth of Virginia, Department of Waste Management.

October 19, 1990 Letter from Rehrig International to Virginia Department of Waste Management

Certification statements and support documentation indicating clean closure of the facilities containment area has been achieved.

November 6, 1990 Letter from Virginia Department of Waste Management to Rehrig International

November 1. 1990 the hazardous waste closure has been performed in accordance with the approved closure plan.

November 9, 1990 RCRA Inspection

On October 15, 1990 an inspection showed that the facility was in compliance with the Virginia Hazardous Waste Management Regulations.

April 1993 Report from Schnabel Environmental Services

Rehrig International ESA Update

May 21, 1993 Letter from Virginia Department of Waste Management to Rehrig International

During an inspection on May 13, 1993 the Rehrig facility was found not to be in total compliance with the Virginia Hazardous Waste Management Regulations.

July 16, 1993 Letter from Virginia Department of Waste Management to Rehrig International

A letter stating corrective actions taken to bring the plant in compliance with waste regulations.

August 8, 1996 Letter from Virginia Department of Waste Management to Rehrig International

After a RCRA compliance inspection on July 11, 1996 the Rehrig facility was found to be not in compliance with waste management regulations.

September 4, 1996 Letter from Rehrig International to VDEQ

A letter stating corrective actions taken to bring the plant in compliance with waste regulations.

September 23, 1996 Letter from CTI Consultants, Inc. to Rehrig International

Proposal for visual inspection of fiberglass tanks.

October 3, 1996 Letter from Commonwealth of Virginia Department of

Environmental Quality to Rehrig International RCRA Compliance Inspection, Rehrig International

December 17, 1996 Virginia Waste Management Board Consent Order

Due to violations during RCRA inspections on July 11 and September 16, 1996 the Virginia Department of Environmental Quality, Piedmont Regional Office, has ordered a schedule of compliance as well as a fine.

March 17, 1997 Letter from Virginia Department of Waste Management to Rehrig International

On March 6, 1997 another follow up inspection was done after much work was completed by Rehrig International to get the plant in compliance with the waste regulations.

May 15, 1998 Letter from Virginia Department of Environmental Quality to Rehrig International

Letter states that all terms of the January 23, 1997 consent order with VDEO have been met.

November 25, 1998 Letter from Virginia Department of Waste Management to Rehrig International

Rehrig International was found, after a Hazardous Waste Management Compliance Inspection on November 17, 1998, to be in compliance with waste regulations.

September 23, 2003 Internal Memorandum – Virginia Department of Environmental Quality

Internal memo stating that the facility is no longer active at this location.

NOVEMBER 14, 1980 NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

IX. DESCRIPTION OF HAZARDOUS WASTES (continued from front)									
A. HAZARDOUS WASTES FROM NON—SPECIFIC SOURCES. Enter the four—digit number from 40 CFR Part 261.31 for each listed hazardous waste from non—specific sources your installation handles. Use additional sheets if necessary.									
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X. CERTIFICATION I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.									
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NOVEMBER 19, 1980 USEPA FORMS COMPLETED BY REHRIG INTERNATIONAL

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REHRIG INTERNATIONAL, IN	C				YES NO
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(I. MAP) Attach to this application a topograph	ic map of the area exter	nding to at least or	ne mile beyond p	operty bounderies.	The map must show
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(III, CERTIFICATION (see instructions)				• .	
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. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DINCLUDE DESIGN CAPACITY. ACH PROCESS ENTERED HERE RIBING OTHER PROCESSES (code "TO4"). FOR

IV. DESCRIPTION OF HAZARDOUS WASTES

- A. EPA HAZARDOUS WASTE NUMBER Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number(s) from 40 CFR, Subpart C that describes the character tics and/or the toxic contaminants of those hazardous wastes.
- B. ESTIMATED ANNUAL QUANTITY For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis, For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

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If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

PROCESSES

- 1. PROCESS CODES:
 - For listed hazardous waste: For each listed hazardous waste entered in column A select the code/s/ from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code/s/ from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes, If more are needed: (1) Enter the first three as described above; (2) Enter "000" in extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

- 1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.

 In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter

"included with above" and make no other entries on that line.

3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

100 p	A. EPA		C. UNIT	D. PROCESSES						
HAZARD. ZO WASTENO JZ (enter code)		B, ESTIMATED ANNUAL QUANTITY OF WASTE	OF MEA- SURE (enter code)	1. PROCESS (ente		2. PROCESS DESCRIPTION (if a code is not entered in D(1))				
X-1	K 0 5 4	900		0 3 D 8 0						
X-2	D 0 0 2	400	P	03D80						
X-3	D 0 0 1	100	P	o'3 D'8 0						
X-4	D 0 0 2					included with above				

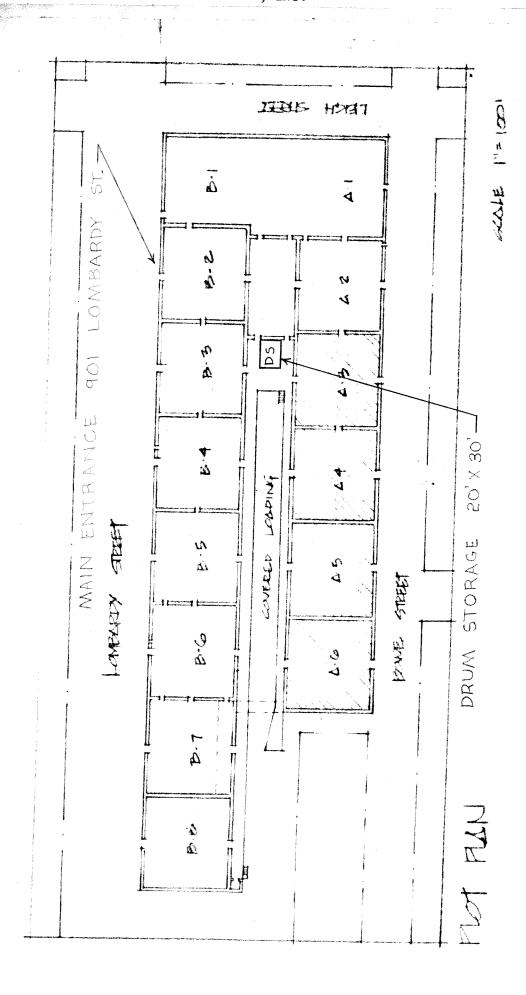
Continued from page 2.

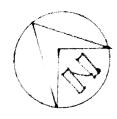
NOTE: Photocopy this page before comp ng if you have more than 26 wastes to list. Form Approved OMB No. 158-\$80004 EPA I.D. NUMBER (enter from page FOR OFFICIAL USE ONLY 0/8 W DUP DUP IV. DESCRIPTION OF HAZARDOUS WASTES (continued) A. EPA HAZARD. WASTENO (enter code) C. UNIT OF MEA SURE (enter code) D. PROCESSES B. ESTIMATED ANNUAL QUANTITY OF WASTE Zo. 1. PROCESS CODES (enter) 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) 36 O 0 20 F 0 0 7 Included with above 0 0 8 Included with above F ol 9 O Included with above 6 9 10 11 12 13 14 15 17 18 19 20 21 22 23 25 26 EPA Form 3510-3 (6-80)

Continued from the front.		V Na
IV. DESCRIPTION OF HAZARDOUS WASTES	(cont d)	
E. USE THIS SPACE TO LIST ADDITIONAL	PROCESS CODES FROM ITEM D(1) ON PAGE 3.	
	·	
EPA I.D. NO. (enter from page 1)		_
計VAIDO89012837716		
1 2 13 14 15		
V. FACILITY DRAWING	ed on page 5 a scale drawing of the facility <i>(see instructions fo</i>	r more detail).
THE DISCOURAGE AND A DI		
	(aerial or ground—level) that clearly delineate all exist	ing structures; existing storage,
treatment and disposal areas; and sites of future	e storage, treatment or disposal areas (see instructions	10) more detail).
VII. FACILITY GEOGRAPHIC LOCATION	LONGITUDE (degrees, minutes, & seconds)
LATITUDE (degrees, minutes, & se	conds) LONGITODE (
3 7 4p <u> </u>	77	74 75 76 77 - 79
VIII. FACILITY OWNER	71	, green a
VIII. FACILITY OWNER	or as listed in Section VIII on Form 1, "General Information"	, place an "X" in the box to the left and
skip to Section IX below.		
D. If the facility owner is not the facility operat	or as listed in Section VIII on Form 1, complete the following	g items:
		2. PHONE NO. (area code &
	FACILITY'S LEGAL OWNER	
E H.B.P. ASSOC.	MR. CHARLES SCHUMANN General Parti	$\frac{804}{55}$ $\frac{-272}{56}$ $\frac{211}{62}$
15 115 3, STREET OR P.O. BOX	4. CITY OR TOWN	5.ST. 6. ZIP CODE
<u>- </u>	5 5.1	V A 2 3 2 3 5
F 7737 Jahnke Rd.	G Richmond,	40 41 42 47 - 51
IX. OWNER CERTIFICATION		
	nally examined and am familiar with the information	submitted in this and all attached
	nally examined and all familial with the information nose individuals immediately responsible for obtaining amplete. I am aware that there are significant penalties	
submitted information is true, accurate, and co including the possibility of fine and imprisonm	omplete. I am aware that there are significant politicises lent	
	- CICHATURE	C. DATE SIGNED
A. NAME (print or type)		1/22/81
H.B.P. Associ	Chades ST. Scheman Jenes	al Partner 23/01
X, OPERATOR CERTIFICATION		
	nally examined and am familiar with the information	submitted in this and all attached
submitted information is true, accurate, and co	omplete. I am aware that there are significant penalties	roi submitting laise information,
including the possibility of fine and imprisonm	ent.	C. DATE SIGNED
A. NAME (print or type)	B. SIGNATURE	
n ni 114 n C- 1-11	20 to lo hadoll	11-11-80
D. Philip Goodell	~ John The Control	CONTINUE ON PAG

EPA Form 3510-3 (6-80)

PAGE 4 OF 9





JANUARY 21, 1981 LETTER FROM USEPA TO REHRIG INTERNATIONAL



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

6TH AND WALNUT STREETS PHILADELPHIA. PENNSYLVANIA 19106

EPA I.D. # VAD 08 902 8377

January 21, 1981

Mr. Paul Bauz Rehig International, Inc. 901 North Lombardy Street Richmond, VA 23220

Re: Acknowledgment of Application for a Hazardous Waste Permit

.This is to acknowledge that the Environmental Protection Agency has received: (1) A notification pursuant to Section 3010 of the Resource Conservation and Recovery Act for the facility located at the address shown above; and (2) Part A of a Hazardous Waste Permit Application for that facility, including a signed statement that the operation of the facility, or its construction, began prior to November 19, 1980. While the information provided by these submissions has not been fully reviewed for completeness or accuracy, EFA will accept this information as an initial qualification for interim status pursuant to Section 3005 of the Act. If after further review of this information, EPA determines that the owner or operator did not fulfill all the requirements for interim status, EPA may treat the owner or operator as not having qualified for interim status pursuant to that section and will advise the owner or operator of that determination. Facility owners and operators with interim status must comply with the standards set forth at 40 CFR Part 265 until a permit is issued. Interim status may be terminated if the owner or operator fails to furnish any additional information requested by EPA in order to process a permit application.

AUGUST 5, 1981 LETTER FROM USEPA TO H.B.P. ASSOCIATES



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

6TH AND WALNUT STREETS PHILADELPHIA PENNSYLVANIA 19106

August 5, 1981

Mr. C. N. Schumann H. B. P. Associates 7737 Jahnke Road Richmond, VA 23225

Dear Mr. Schumann:

This is to acknowledge that the Environmental Protection Agency has completed processing the information submitted in your Part A Hazardous Waste Permit Application. It is the Agency's opinion, based on the assumption that the information submitted is complete and accurate, you as an owner or operator of a hazardous waste management facility have met the requirements of Section 3005(e) of the Resource Conservation and Recovery Act (RCRA) for Interim Status. EPA has not verified the information submitted. If it is determined that the information is incomplete or inaccurate, you may be asked to provide additional information or in certain circumstances it may be determined that you do not qualify for interim status. In addition, this notice does not preclude a citizen from taking legal action under the provisions of Section 7002 of RCRA.

A facility not meeting the requirements for interim status under Section 3005 of RCRA may be required to close until such time as a hazardous waste permit is issued. Interim status may also be terminated, according to procedures in 40 CFR Part 124, if the owner or operator fails to furnish additional information which EPA requests in order to process a permit application.

As an owner or operator of a hazardous waste management facility, you are required to comply with the interim status standards as prescribed in 40 CFR Parts 122 and 265 or with State rules and regulations in those States which have been authorized under Section 3006 of RCRA. In addition, you are reminded that operating under interim status does not relieve you from the need to comply with all applicable State and local requirements.

The enclosure to this letter identifies the processes your facility may use, their design capacities, and types of waste your facility may accept during interim status. This information was obtained from the Part A Permit Application. If you wish to handle new wastes, change processes, increase the design capacity of existing processes, or change ownership or operational control of the facility, you may do so only as provided in 40 CFR Sections 122.22 and 122.23.

CONDITIONS OF OPERATION DURING - INTERIM STATUS

Date Prepared:	August	5.	1981
	1	-,	

The information shown below is based solely on the information that the owner and operator of this facility submitted in Part A of the Hazardous Waste Permit Application. This is not a determination by EPA that this facility is an environmentally acceptable facility for treating, storing or disposing of the hazardous wastes listed below.

1. Facility name, location, and EPA Identification Number.

Name: Rehrig International Inc.

Location: 901 Lombardy Street Richmond, VA 23220

EPA I.D. No.: VAD 08 902 8377

II. EPA considers the following to be the owner or operator of the facility and therefore the person(s) who must comply with the requirements set forth in 40 CFR Parts 122 and 265.

Owner's Name: Mr. C. N. Schumann

H. B. P. Associates 7737 Jahnke Road Richmond, VA 23225

Operator's Name: Mr. D. P. Goodell

III. During the period of interim status, the facility may use <u>only</u> the following processes for treating, storing or disposing of hazardous waste, up to the design capacities that are indicated.

PROCESS	DESIGN CAPACITY
S01	5,000 Gals.

IV. During the period of interim status, the facility may handle only the hazardous wastes with the following EPA Hazardous Waste Numbers, and/or solid waste exhibiting hazardous characteristics with the following EPA Hazardous Waste Numbers.

F006	F007	F008		• .	F009		
		•	•			•	•

OCTOBER 15, 1982

RCRA INSPECTION

ATES ENVIRONMENTAL PROTECTION AGENCY UNITED S Region III - 6th & Walnut Sts. Philadelphia, Pa. 19106

JECT: RCRA Inspection- Rehrig International

DATE: O

M:

Harry J. Weber, Environmental Scientist Harry J. Weber, Environmental Scientist Superfund/RCRA Compliance Section (3AN23)

FILE

Walter F. Lee, Chief Thru:

Superfund/RCRA Compliance Section (3AW23)

THE STATE IS TAKING ACTION TO RESOLVE THE VIOLATIONS IN THIS

INSPECTION REPORT.

WE WILL MONITOR THE STATE ACTIVITY REGARDING RESOLUTION

OF THESE VIOLATIONS.

CHECKLIST FOL	R RCRA INSPECTION OF GENERATORS	RO USE
Variable of Facility: E	orig International Inc.	Inspection file
00 1	N. Lombardy St.	No •
Address: 901	end 23220	Reviewer
		Date reviewed:
EPA Generator ID Num	Del. YALL	Form "A" (VA)
	Representative: Paul Baug	
Title: Platima	Manager 7011	
Telephone Number:	804) 355-7864	
VA HWM Regs.	the type of work activity that occur generator.	3 40 0
	manufacture of shopping contrand nickel-chro	
	plating of the carts.	
,	plating of the source.	
	2. Does the generator dispose of its wa	astes:
	a) On-site? (Circle one or both)
	(b) Off-site? Note: If on-site, then checklist f	or both a
	generator and TSD facility must be if on-site more than 90 days.	Completed
	3. What is the amount (in kilograms) o as appropriate, of:	
3.03.01	a) Hazardous waste produced per the generator facility? 1760	KIIOBIGED
3.03.02	b) Hazardous waste accumulated; generator facility at an 15,400 kilograms 270 drum	<i>₽</i>
3.03.03.(a,b)	c) Any commercial chemical promanufacturing chemical into having the generic name listed Part 261.33(e) or any off-spec	in 40 CFR

commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in 40 CFR Part 261.33(e) which is discarded each month or is accumulated at any time for discarding? kilograms

- d) Containers identified in 40 CFR Part 261.33(c) larger than 20 liters in capacity that are discarded each month or are accumulated at any time for discarding? (number)
- e) Inner liners from containers identified under 40 CFR Part 261.33(c) that is discarded each month or is accumulated for discarding? kilograms
- f) Any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in 40 CFR Part 261.33(e) that is discarded each month or is accumulated at any time for discarding? kilograms

If the amount of (c) and (d) is less than 1, the amount of (e) is less than 10, the amount of (f) is less than 100, and the amount of (a) and (b) is less than 1000, then the facility qualifies as a small quantity generator and Form C should be completed instead of Form A.

What categories of hazardous wastes originate at the generator's facility? Please circle yes or no.

Ignitable wastes

Reactive wastes

Corrosive wastes

d) EP Toxic wastes

RCRA Listed Waste e)

Is the generator presently:

Treating hazardous waste?

Yes

Yes

No

3.03.03.(c)

3.03.03(d)

3.03.03(e)

3.07

3.09

3.08

3.10

3.11

b) Storing hazardous waste?

Yes

No

c) Disposing hazardous waste?

No

Note: if the generator performs any of the activities noted in Question #5 [except as provided for at 9.01(c)(7), then the inspector must complete Form B, entitled "RCRA Checklist for inspection of hazardous waste treatment, storage and disposal facilities."

Is a manifest system currently in operation meme mont at the generator's facility so that off-site shipment of hazardous wastes can be tracked?

off-site to No date Yes

7. Please inspect the generator's manifest for the following information:

Is the TSD facility which receives a generator's hazardous waste identified by name, address, telephone number, EPA ID number?

No Yes

Is a serialized manifest document number included on the form?

Yes No

Are the generator's name, address, telephone number and EPA ID number included on the form?

Yes No

Are the name, address, telephone number, and EPA identification number of each transporter included on the form?

No Yes

Is a description of the generator's hazardous waste to be treated, stored, or disposed included on the manifest?

No Yes

f) Are the quantity of each waste, byunits of weight or volume, and the typeand number of containers loaded in the transport vehicle included on the manifest form?

No Yes

Is the following certification noted on g) the generator's manifest form and is the certification acknowledged by the generator's signature?

> "This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled

6.04

5.04.03(c)

5.04.02

5.04.03(a)

5.04.03(b)

5.04.04

5.04.05

5.04.06

transportation according to the available regulations of the DOT and FPA." 1.04.07 h) Are there adequate copies of the manifest available for generator, transporter, and TSD's? 8. Is hazardous waste being accumulated on-site by the generator for less than 90 days? if yes, 6.05.05(a)(3) a) Is the date accumulation of waste began clearly marked on each storage container? b) Are storage containers in good condition, i.e., no corrosion, leaking, or structural deformations? 6.05.05(a)(4) c) At the time of accumulation, are the storage containers clearly labeled as containing a particular hazardous waste in accordince with DOT regulations? 9.04.01(a) 9. Does the generator have an established fragulation with the contingency plan to deal with emergencies duy cake - count applied that may impact hazardous waste currently in the marked of the time of accumulation or on-the-job training or on-the-job training in hazardous waste management procedures? 9.02.07(d)(1) 10. Bave facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management and the name of the employee filling each job? 9.02.07(d)(1) 11. Does the generator facility have on record a viritien position description for each job title noted in Question #11? 9.02.07(d)(3) 13. Does the facility presently maintain a written description of the type and amount of introductory and continuing training for those employees noted in Question #11? 9.03.02 14. *At the generator facility, is thefollowing equipment installed: 9.03.02(a) a) An internal communications or alarm system capable of providing immediate	•	and are in proper condition for
manifest available for generator, transporter, and TSD's? 8. Is hazardous waste being accumulated on-site by the generator for less than 90 days? If yes, 6.05.05(a)(3) a) Is the date accumulation of waste began clearly marked on each storage container? 6.05.05(a)(2) b) Are storage containers in good condition, i.e., no corrosion, leaking, or structural deformations? c) At the time of accumulation, are the storage containing a particular hazardous waste in accordinc with DOT regulations? 9.04.01(a) 9. Does the generator have an established diagradus words contingency plan to deal with emergencies that may impact hazardous waste currently in words for the management procedures? 9.02.07(a) 10. Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures? 9.02.07(d)(1) 11. Does the generator facility maintain a record of job titles for personnel that are involved with hazardous vaste management and the name of the employee filling each job? 9.02.07(d)(2) 12. Does the generator facility have on record a written position description for each job title noted in Question #11? 9.02.07(d)(3) 13. Does the facility presently maintain a uritten description of the type and amount of introductory and continuing training for those employees noted in Question #11? 9.03.02 14. *At the generator facility, is thefollowing equipment installed: a) An internal communications or alarm		transportation according to the available regulations of the DOT and
by the generator for less than 90 days? If yes, a) Is the date accumulation of waste began clearly marked on each storage container? Yes No 6.05.05(a)(2) b) Are storage containers in good condition, i.e., no corrosion, leaking, or structural deformations? c) At the time of accumulation, are the storage containing a particular hazardous waste in accordance with DOT regulations? 9.04.01(a) 9. Does the generator have an established flagandeus accuting ency plan to deal with emergencies day cake accuting in pact hazardous waste currently in which that may impact hazardous waste currently in which may impact hazardous waste currently in which may impact hazardous waste in accordance with DOT results in accorda	5.04.07	manifest available for generator,
clearly marked on each storage container? Yes No 6.05.05(a)(2) b) Are storage containers in good condition, i.e., no corrosion, leaking, or structural deformations? Yes No 6.05.05(a)(4) c) At the time of accumulation, are the storage containing a particular hazardous waste in accordance with DOT regulations? 9.04.01(a) 9. Does the generator have an established reacution contingency plan to deal with emergencies day cake countingency feel of the counting training or on-the-job training in hazardous waste management procedures? 9.02.07(d)(1) 10. Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures? 9.02.07(d)(1) 11. Does the generator facility maintain a written position description for each job title noted in Question #11? 9.02.07(d)(2) 12. Does the generator facility have on record a written position description for each job title noted in Question #11? 9.02.07(d)(3) 13. Does the facility presently maintain a written description of the type and amount of introductory and continuing training for those employees noted in Question #11? 9.03.02 14. *At the generator facility, is thefollowing equipment installed: 2.00.02(a) 2.00.02(b) 2.00.02(c) 2.00.02(c) 3.00.02 2.00.02(c) 3.00.02 3.00.02 3.00.02 3.00.02 3.00.02 3.00.02 3.00.02 3.00.02 3.00.02 3.00.02 3.00.02 3.00.02 3.00.02 3.0	6.05.05	by the generator for less than 90 days? If
condition, i.e., no corrosion, leaking, or structural deformations? C) At the time of accumulation, are the storage containing a particular hazardous waste in accordance with DOT regulations? 9.04.01(a) 9. Does the generator have an established fraganders weaker that may impact-hazardous waste contingency plan to deal with emergencies duy cake contingency plan to deal with emergencies duy cake contingency plan to deal with emergencies that may impact-hazardous waste currently in which flammable storage at the facility? 9.02.07(a) 10. Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures? 9.02.07(d)(1) 11. Does the generator facility maintain a record of job titles for personnel that are involved with hazardous waste management and the name of the employee filling each job? 9.02.07(d)(2) 12. Does the generator facility have on record a written position description for each job title noted in Question #11? 9.02.07(d)(3) 13. Does the facility presently maintain a written description of the type and amount of introductory and continuing training for those employees noted in Question #11? 9.03.02 14. *At the generator facility, is thefollowing equipment installed: a) An internal communications or alarm	6.05.05(a)(3)	a) Is the date accumulation of waste began clearly marked on each storage container? Yes No
storage containers clearly labeled as containing a particular hazardous waste in accordance with DOT regulations? 9. Does the generator have an established fragarders waste contingency plan to deal with emergencies day cake - can't fall that may impact-hazardous waste currently in what flammable yes for the facility? 9.02.07(a) 10. Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures? 9.02.07(d)(1) 11. Does the generator facility maintain a record of job titles for personnel that are involved with hazardous waste management and the name of the employee filling each job? 9.02.07(d)(2) 12. Does the generator facility have on record a written position description for each job title noted in Question #11? 9.02.07(d)(3) 13. Does the facility presently maintain a written description of the type and amount of introductory and continuing training for those employees noted in Question #11? 9.03.02 14. *At the generator facility, is thefollowing equipment installed: a) An internal communications or alarm	6.05.05(a)(2)	condition, i.e., no corrosion, leaking,
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record of job titles for personnel that are involved with hazardous waste management and the name of the employee filling each job? 9.02.07(d)(2) 12. Does the generator facility have on record a written position description for each job title noted in Question #11? 9.02.07(d)(3) 13. Does the facility presently maintain a written description of the type and amount of introductory and continuing training for those employees noted in Question #11? 9.03.02 14. *At the generator facility, is thefollowing equipment installed: 2.03.03(a) An internal communications or alarm	9.02.07(a)	10. Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste
written position description for each job title noted in Question #11? 9.02.07(d)(3) 13. Does the facility presently maintain a written description of the type and amount of introductory and continuing training for those employees noted in Question #11? 9.03.02 14. *At the generator facility, is the following equipment installed: 2.03.03(a) An internal communications or alarm	9.02.07(d)(1)	record of job titles for personnel that are involved with hazardous waste management and
written description of the type and amount of introductory and continuing training for those employees noted in Question #11? 9.03.02 14. *At the generator facility, is thefollowing equipment installed:	9.02.07(d)(2)	written position description for each job
equipment installed:	9.02.07(d)(3)	written description of the type and amount of introductory and continuing training for
9.03.02(a) a) An internal communications or alarm system capable of providing immediate	9.03.02	14. *At the generator facility, is thefollowing equipment installed:
	9.03.02(a)	a) An internal communications or alarm system capable of providing immediate

personnel if the hazardous waste storage area is threatened by fire or explosion?

b) A device at the scene of hazardous waste generator operations capable of summoning emergency assistance from Police, Fire departments, etc.?

No

No

c) Fire control equipment and an adequate supply of fire fighting water or fire suppression chemicals?

No

15. *Does the generator facility have adequate aisle space to allow the unobstructed movement of personnel and equipment during emergencies?

No

Does the facility have a contingency plan does not have which contains the following elements:

No

No

a) A detailed description of emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, and water?

Yes

Yes

b) A detailed description of arrangements formally agreed to by local police, fire departments, and state and local emergency teams to provide assistance during emergency situations?

c) A listing of names, addresses, and phone numbers of the generator facility emergency response coordinators?

Yes No

Note: This listing should include names and phone numbers of emergency coordinators available on twenty-four hour basis.

d) A list of appropriate emergency equipment necessary to cope with emergencies at the generator facility?

Yes No

e) *An evacuation plan for the generator facility if Management believes such a plan is a definite requirement for their particular generator facility.

notrequired

No Yes

9.04

9.03.05

9.03.02(b)

9.03.02(c,d)

9.04.02(a,b)

9.04.02(c)

9.04.02(d)

9.04.02(e)

9.04.02(f)

the

	17. Please provide detailed comments on specific problems encountered during the inspection. For instance, industry requests for clarification of specific RCRA rules and regulations and their applicability at the facility can be noted below or described in a separate memo attached to the inspector's checklist. **Yhore in madaman from the specified onto the inspector's checklist. **There is madaman from the specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The material cont be specified onto the inspector's checklist. **The m
	Torre Lynn Cross
	• · · · · · · · · · · · · · · · · · · ·
Title: Publi	r Heri Oth Engineer
Agency: Va. State	Health Dept., Div. of Solid & Hazardous Waste Management
	109 Governor Street. Richmond. VA 23219
Date of Inspection	on: Sept. 21, 1982
Inspector's Name:	
	te Health Dept., Div. of Solid & Hazardous Waste Management
Office Location:	109 Governor Street, Richmond, VA 23219
Date of Inspecti	on:

7

CHECKLIST FOR	RCRA INSPECTION OF TREATMENT, DISPOSAL (TSD) FACILITIES	RO USE		-
	Rerrig International	Inspection	File	
Address: 90	N. Lembardy St.	No		
Pichm		Reviewer_		
EPA ID Number: YA		Date revie	wed	
Era is number	Representative: Representative: Representative:	Form "B" (VA)	
•	4			
	Manager 355-7864			
Telephone: <u>(804</u>	,			
SITE CHARACTERIZATI	ON (Please denote if the facility stores, or disposes of hazardous wa appropriate sub-category that occufacility.)			
TREATER	STORER	DISPOSE	R	
Filtration Incineration Thermal Reduction Recycling/Recove Chem/Phys/Bio Transport	eatments Below ground tank(s) Other	Landfill ope Land treatm Surface Imp Incineratio Other	ent oundmen	
Solvent Recovery			,	
VA HWM Regs.	INSPECTION PROCEDURE 1. Does the facility generate hazardo	us wastes?	Yes	No
	Note: Please complete the ge checklist if TSD facility that hazardous wastes which are dispossite.	generaces		·
9.02.03(a)	2. Does the facility receive hazard from a foreign source?		Yes	No
	If yes, has the facility not Commissioner of the date of arriva	•	Yes	No
9.02.04(a)	3. For on-site tsd, does the facil sufficient waste analysis?		Yes	No
9.02.04	4. For off-site, does the facility place a waste analysis plan?	y have in If so,	Yes	No

. . . .

9	0.02.04(a)(1)		a)	Does the plan enable facility personnel to identify hazardous wastes being handled by the facility?	Yes	No
Ç	9.02.04(Ъ)(3)		ъ)	Does the plan enable facility personnel to confirm that wastes actually received at the TSD facility are the wastes indicated on the generator's manifest form?	Yes	No
	9.02.05(b)(1)	5.	sur	veillance system which monitors and trols entry to the active portion of the ility, including:	Yes	No
)	9.02.05(b)(2)(i)		a)	an artificial or natural boundary which surrounds active portions of the facilityand,	ves)	No No
	9.02.05(b)(2)(ii)		ъ)	A means to control entry at all times, i.e., gates, attendants, locked entrances, etc.?	Yes	No
	9.02.05(c)	6.	act act	ces the TSD facility have a restricted cess sign posted at each entrance to the rive portion of the facility? (an example ald be: "Danger - Unauthorized Personnel op Out!") If so,	Yes	No
			a).	Is the sign legible from a distance of 25 feet?	Yes	No
)			ъ)	Is the sign in English or any other foreign language predominant to the geographical area?	Yes	No
	9.02.06(b)(1)	7.	s c eq an	es the TSD facility have a written hedule for inspecting all emergency uipment, security devices, and operating d structural equipment, important to the evention, detection or response to vironmental/human health emergencies?		ected daily ally on the
	9.02.06(d)	8.	Do th	es the facility have an inspection log for the items in question #7 that includes the te, time of inspection, observations made, and inspector's initials?	Yes	No /
	9.02.07(d)(1)	9.	ic	des the TSD facility maintain a record of ob titles for personnel that are involved ith hazardous waste management?	Yes	No

Νo

Yes

9.02.07(d)(1)	10.	Does the TSD facility have the name of the employee filling each position in hazardous waste management?	Yes	No V
9.02.07(d)(2)	11.	Does the TSD facility have on record a written position description of each job title noted in Question #9?	Yes	No /
9.02.07(a)		12.	Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures?	Yes	No
9.02.07(d)(3)	13.	Does the facility presently maintain a written description of the type and amount of introductory and continuing training for those employees noted in Question #7?	Yes	No /
9.02.07(d)	(4)	14.	Does the facility have records to document this training?	Yes	No /
9.03.02		15.	*At the TSD facility, is the following equipment installed:		
9.03.02(a)			a) An internal communications or alarm system capable of providing immediate emergency instructions to facility personnel if the hazardous waste storage area is threatened by fire or explosion?	Yes	No
9.03.02(b)			b) A device at the scene of hazardous waste TSD operations capable of summoning emergency assistance from Police, Fire departments, etc.?	Yes	No
9.03.02(c,	,d)		c) Fire control equipment and an adequate supply of fire fighting water or fire supression chemicals?	Yes) No
9.04	,	16.	Does the facility have a contingency plan which contains the following elements:	* ~	Les comment,
9.04.02(a)		a) A detailed description of emergency procedures which facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, and water?	Yes	No
9.04.02(c)		b) A detailed description of arrangements formally agreed to by local polic, fire departments, and State and local emergency teams to provide assistance during emergency situations? (if such arrangements are refused, documentation	V a a	N o

arrangements are refused, documentation of the refusal is sufficient).

9.04.02(d)	c) A listing of names, addresses, and phone numbers of the TSD facility emergency response coordinators? Note: This listing should include names and phone numbers of emergency coordinators available on twenty-four hour basis.	Yes	No
9.04.02(e)	d) A list of appropriate emergency equipment necessary to cope with emergencies at the TSD facility?	Yes	No
9.04.02(f)	e) *An evacuation plan for the TSD facility if Management believes such a plan is a definite requirement for their particular TSD facility?	Yes	No
9.04.03	f) Are copies of the plan sent to the local police and fire departments, hospital, and emergency rescue team?	Yes	No
9.04.05	17. Does the facility have at all times at least one employee either on-call or on the site who is responsible for coordinating all emergency response measures?	Yes	No
	If so, please complete below: Name: Paul Baug Title: Plating Manager Telephone Number:		
9.04.08(a)	18. Does the TSD facility have a written operating record which contains the following information:		•
9.04.08(b)(1)	a) A description of and the quantity of each hazardous waste received, and the method and date of treatment, storage or disposal? (Required if off-site generation)	N ∕. Yes	A No
9.04.08(b)(2)	b) The location of each hazardous waste within the facility and the quantity at each location?	Yes	No
9.04.08(b)(3)	c) Detailed records and results of waste analyses andincineration trial tests performed on wastes coming into the facility? (Required if off-site generation)	Yes	No

Yes

		•
9.04.08(ъ)(4)	d) Detailed operating summary reports and description of all emergency incidents that required the implementation of the facility contingency plan?	ν/A Yes No
9.04.08(b)(5)	e) Detailed records and results of inspections performed on facility emergency equipment, TSD systems, and hazardous waste areas?	Yes No
9.04.08(b)(6)	f) Detailed monitoring, testing, and analytical data where required?	Yes No
9.06.03	9. Have the TSD facility operators prepared written closure plans?	Yes (No)
9.06.08	O. Have the TSD facility operators prepared written post closure plans?	N/A Yes No
9.04.07	1. Does the TSD facility receive hazardous waste from off-site generators? If yes, are the following procedures implemented:	Yes No
5.05	a) Manifest copies are signed and dated	Yes No
5.05.03	b) A copy is given to the transporter	Yes No
5.05.04 5.05.04	c) A copy is sent to the generator	Yes No
5.05.05	d) A copy is returned and filed at the TSD facility	Yes No
9.05	2. Does the facility owner utilize surface impoundments, landfills or land treatment technologies?	Yes No
9.05	3. If yes, has the owner implemented a groundwater monitoring program?	Yes No
	4. Has an annual report been filed?	Yes No
	MUST BE OBSERVED	
	25. The inspector should check for the following conditions at the TSD facility:	- : <u>-</u>
9.02.08(a)	a) Open fires	Yes No
9.02.08(b)(2,3)	b) Fumes or gases	Yes No

c) Leaks or corrosion in containers or other storage structures

9.02.08(b)(4) 9.08.02

9.02.08(b)(5) 9.03.01		d) Leachate to receiving streams	Yes	No
9.03.01		e) Malfunction of equipment	Yes	No
9.08.02		f) Bulging drums	Yes	No
9.02.08(b)(1)		g) Excessive heat generation from storage facilities, lagoons, storage piles, etc.	Yes	No
9.03.05	26.	*Does the TSD facility have adequate aisle space to allow the unobstructed movement of personnel and equipment during emergencies?	Yes	No
	27.	Please provide detailed comments on specific problems encountered during the TSD facility inspection. For instance, industry requests for clarification of specific rules and regulations and their applicability at the facility can be noted below or described in a separate memo attached to the inspector's checklist.		
		Comment #1 - There is no danger This waste in case of fire.	\sim	
		it is dry, the material can spilled onto the water. The		
		storage area is insido, and		
-		therefore can met be recooperated into the air, water, or land	•	
,	- Laboratoria de la constanta			
		. 7		

Inspector's Name: John Lynn Cress
Title: Public Health Engineer
3
Agency: Va. State Health Dept., Div. of Solid & Hazardous Waste Mgt.
Office Location: 109 Governor Street, Richmond, VA 23219
Date of Inspection: 101 1982
Inspector's Name:
Title:
11616.
Agency: Va. State Health Dept., Div. of Solid & Hazardous Waste Mgt.
Office Location: 109 Governor Street, Richmond, VA 23219
Date of Inspection:

CHECKLIST FOR RCRA INSPECTION OF USE AND MANAGEMENT OF CONTAINERS

Name of Facility: Rehria Antonnotional

RO USE

Inspection file

Address: 901	N. Rombardy 5t.	No.
Richard	mond, Va. a3aao	Reviewer
EPA Generator ID	Number: <u>VAD</u> 089 028 377	Date reviewed
Facility Inpsecti	on Representative: Paul Bourg	Form "I" (VA)
Title: Platio	ng Managa	
Telephone Number:	(804) 355 - 7864	
	tained in this checklist apply to owners a acilities that store containers of hazardo ides otherwise.	
Va. HWM Regs.		
9.08.02	1. Are all containers in good condition not showing signs of leakage or corrany other deterioration/deform	osion or
9.08.03	2. Are containers lined or made of macompatible with hazardous wastes plathem so that the container will not corrode with the hazardous wastes?	ced into
9.08.04(a)	3. Are all containers holding hazardou kept closed during storage?	s waste (Yes) No
9.08.05	4. Are areas where hazardous waste con are stored inspected by the owner/eat least once a week?	
9.02.06(b)(1) 9.02.06(d)	5. Is an inspection log maintained question #5 of TSD checklist.)	? (See Yes No
9.08.06	6. Are containers holding ignitable or maste located at least 50 ft. fracility's property line?	
9.08.07(a)	7. Are incompatible wastes placed in t container? (See Appendix 5 for example)	
9.08.07(c)	8. Are storage containers holding ha wastes which are incompatible with materials stored in containers, piles, or surface impoundments separ dikes, berms, walls, or other devices	nearby tanks, rated by N/A

Inspector's Name: Jorne Limn Cross
Title: Public Health Engineer
Agency: Va. State Health Dept., Div. of Solid & Hazardous Waste Management
Office Location: 109 Governor Street, Richmond, VA 23219
Date of Inspection: 11 21 1982
Inspector's Name:
Title:
Agency: Va. State Health Dept., Div. of Solid & Hazardous Waste Management
Office Location: 109 Governor Street, Richmond, VA 23219
Date of Inspection:

ATES ENVIRONMENTAL PROTECTION AGENCY Region III - 6th & Walnut Sts.

Philadelphia, Pa. 19106

JECT: RCRA Inspection- Rehrig International

DATE: O

M:

Harry J. Weber, Environmental Scientist Harry J. Weber, Environmental Scientist Superfund/RCRA Compliance Section (3AW23)

FILE

Thru:

Walter F. Lee, Chief

Superfund/RCRA Compliance Section (3AW23)

THE STATE IS TAKING ACTION TO RESOLVE THE VIOLATIONS IN THIS INSPECTION REPORT.

WE WILL MONITOR THE STATE ACTIVITY REGARDING RESOLUTION OF THESE VIOLATIONS.

CHECKLIST FO	OR RCRA INSPECTION OF GENERATORS	RO USE
Name of Facility: Y	Porig International Inc.	Inspection file
_	N. Rombardy St	No •
Address: 901	nend 23220	Reviewer
		Date reviewed:
EPA Generator ID Nu	mber: <u>VAD 089 028 377</u> Do 1 Bo	Form "A" (VA)
	Representative: Paul Baug	101m 11 (121)
Title: Plating	Manager	
Telephone Number:	804) 355-7864	
VA HWM Regs.	 Please provide a brief narrative exp the type of work activity that occur generator. 	s at the
·	manufacture of shopping	
	Contrance Michael Colle	
	plating of the carts.	· · · · · · · · · · · · · · · · · · ·
	2. Does the generator dispose of its wa	stes:
	a) On-site? (Circle one or both)) . · ·
	(b) Off-site?	
-	Note: If on-site, then checklist for generator and TSD facility must be of if on-site more than 90 days.	completed
	3. What is the amount (in kilograms) or as appropriate, of:	
3.03.01	a) Hazardous waste produced per the generator facility? 1760	KIIOgrams
3.03.02	b) Hazardous waste accumulated generator facility at an 15,400 kilograms 270 drum	y lime:
3.03.03.(a,b)	c) Any commercial chemical promanufacturing chemical intended having the generic name listed Part 261.33(e) or any off-speci	in 40 CFR

commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in 40 CFR Part 261.33(e) which is discarded each month or is accumulated at any time for discarding? kilograms

- d) Containers identified in 40 CFR Part 261.33(c) larger than 20 liters in capacity that are discarded each month or are accumulated at any time for discarding? (number)
- e) Inner liners from containers identified under 40 CFR Part 261.33(c) that is discarded each month or is accumulated for discarding? kilograms
- f) Any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in 40 CFR Part 261.33(e) that is discarded each month or is accumulated at any time for discarding?

If the amount of (c) and (d) is less than 1, the amount of (e) is less than 10, the amount of (f) is less than 100, and the amount of (a) and (b) is less than 1000, then the facility qualifies as a small quantity generator and Form C should be completed instead of Form A.

4. What categories of hazardous wastes originate at the generator's facility? Please circle yes or no.

a) Ignitable wastes

b) Reactive wastes

c) Corrosive wastes

d) EP Toxic wastes

e) RCRA Listed Waste

5. Is the generator presently:

a) Treating hazardous waste?

Yes (

Yes (No)

Yes (No

Yes (No)

Yes No

(Yes) No

3.03.03.(c)

3.03.03(d)

3.03.03(e)

3.07

3.09

3.08

3.10

3.11

b) Storing hazardous waste?

No

c) Disposing hazardous waste?

Note: if the generator performs any of the activities noted in Question #5 [except as provided for at 9.01(c)(7), then the inspector must complete Form B, entitled "RCRA Checklist for inspection of hazardous waste treatment, storage and disposal facilities."

6. Is a manifest system currently in operation meme ant at the generator's facility so that off-site shipment of hazardous wastes can be tracked?

off-site to Yes No da No date

7. Please inspect the generator's manifest for the following information:

a) Is the TSD facility which receives a generator's hazardous waste identified by name, address, telephone number, EPA ID number?

Yes No

b) Is a serialized manifest document number included on the form?

Yes No

c) Are the generator's name, address, telephone number and EPA ID number included on the form?

Yes No

d) Are the name, address, telephone number, and EPA identification number of each transporter included on the form?

No Yes

Is a description of the generator's hazardous waste to be treated, stored, or disposed included on the manifest?

Yes No

f) Are the quantity of each waste, byunits of weight or volume, and the typeand number of containers loaded in the transport vehicle included on the manifest form?

No Yes

Is the following certification noted on the generator's manifest form and is the certification acknowledged by the generator's signature?

"This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled

6.04

5.04.03(c)

5.04.02

5.04.03(a)

5.04.03(b)

5.04.04

5.04.05

5.04.06

			·
	·		and are in proper condition for transportation according to the available regulations of the DOT and EPA."
	5.04.07		h) Are there adequate copies of the manifest available for generator, transporter, and TSD's? Yes No
	6.05.05	8.	Is hazardous waste being accumulated on-site by the generator for less than 90 days? If yes,
	6.05.05(a)(3)		a) Is the date accumulation of waste began clearly marked on each storage container? Yes No
)	6.05.05(a)(2)	·	b) Are storage containers in good condition, i.e., no corrosion, leaking, or structural deformations? Yes No
	6.05.05(a)(4)		c) At the time of accumulation, are the storage containers clearly labeled as containing a particular hazardous waste in accordace with DOT regulations? Yes No
	9.04.01(a)	9.	Does the generator have an established hazardous wasters contingency plan to deal with emergencies dry cake - can't will that may impact hazardous waste currently in what flammable storage at the facility? Yes No
)_	9.02.07(a)	10.	Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures?
	9.02.07(d)(1)	11.	Does the generator facility maintain a record of job titles for personnel that are involved with hazardous waste management and the name of the employee filling each job? Yes
	9.02.07(d)(2)	12.	Does the generator facility have on record a written position description for each job title noted in Question #11?
	9.02.07(d)(3)	13.	Does the facility presently maintain a written description of the type and amount of introductory and continuing training for those employees noted in Question #11? Yes No
	9.03.02	14.	*At the generator facility, is thefollowing equipment installed:
	9.03.02(a)		 a) An internal communications or alarm system capable of providing immediate

personnel if the hazardous waste storage area is threatened by fire or explosion?

Yes

No

No

No

- 9.03.02(b)
- 9.03.02(c,d)
- 9.03.05
 - 9.04
 - 9.04.02(a,b)
 - 9.04.02(c)
 - 9.04.02(d)

- 9.04.02(e)
- 9.04.02(f)

b) A device at the scene of hazardous waste generator operations capable of summoning emergency assistance from Police, Fire departments, etc.?

c) Fire control equipment and an adequate supply of fire fighting water or fire suppression chemicals?

15. *Does the generator facility have adequate aisle space to allow the unobstructed movement of personnel and equipment during emergencies?

No

Does the facility have a contingency plan does not have which contains the following elements:

No

No

No

 a) A detailed description of emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, and water?

Yes

Yes

Yes

b) A detailed description of arrangements formally agreed to by local police, fire departments, and state and local emergency teams to provide assistance during emergency situations?

c) A listing of names, addresses, and phone numbers of the generator facility emergency response coordinators?

Note: This listing should include names and phone numbers of emergency coordinators available on twenty-four hour basis.

d) A list of appropriate emergency equipment necessary to cope with emergencies at the generator facility?

Yes No

e) *An evacuation plan for the generator facility if Management believes such a plan is a definite requirement for their particular generator facility.

notrequired

No Yes

	17. Please provide detailed comments on specific problems encountered during the inspection. For instance, industry requests for clarification of specific RCRA rules and regulations and their applicability at the
	facility can be noted below or described in a separate memo attached to the inspector's checklist.
	* There is no danger from this waste, in case of fire ordina it is
- -	the material cont be spelled and
	therefore can not be released into
	air, noter, or land.
Inspector's Name:	Torri Lynn Cross
	r Here Oth Engineer
Agency: Va. State	e Health Dept., Div. of Solid & Hazardous Waste Management
Office Location:	109 Governor Street. Richmond. VA 23219
Date of Inspection	on: Sept. 21, 1982

7

CHECKLIST FOR	RCR DISPO	A INSPECTION OF TREATMENT, SAL (TSD) FACILITIES	RO USE		
		ing International	Inspection	File	
Address: 90		Lembardy St.	No •		
			Reviewer_		
<u> Vichm</u>			Date revie	ewed	
EPA ID Number: YA			Form "B"		
Facility Inspection	Repr	esentative: Tan Dang	FOIM D	(tt)	
Title: Platine	_	Manager			
Telephone: (804	9 3	355-7864			
1010pitotis					
SITE CHARACTERIZATI	s	Please denote if the facility tores, or disposes of hazardous was appropriate sub-category that occur acility.)	SLE. ALGOS		
TREATER		STORER	DISPOSE	R	
Filtration Incineration Thermal Reduction Recycling/Recove Chem/Phys/Bio T: Reprocessing Solvent Recover Other	ery reatm	Surface Impoundment Drum Above ground tank(s)	Landfill op Land treatm Surface Imp Incineration	ent oundmer	
	TNSP	ECTION PROCEDURE			
VA HWM Regs.	i	Does the facility generate hazardou	s wastes?	Yes	No
-		Note: Please complete the genchecklist if TSD facility g hazardous wastes which are dispose site.	eneraces		
9.02.03(a)	2.	Does the facility receive hazard from a foreign source?	ous waste	Yes	No
		If yes, has the facility noti	. •	Yes	No
9.02.04(a)	3.	For on-site tsd, does the facili sufficient waste analysis?	ty have a	Yes	No
9.02.04	4.	For off-site, does the facility place a waste analysis plan?	y have in If so,	Yes	No

	9.02.04(a)(1)		a)	Does the plan enable facility personnel to identify hazardous wastes being handled by the facility?	Yes	No
	9.02.04(b)(3)		b)	Does the plan enable facility personnel to confirm that wastes actually received at the TSD facility are the wastes indicated on the generator's manifest form?	Yes	No
	9.02.05(b)(1)	5.	sur	veillance system which monitors and trols entry to the active portion of the ility, including:	Yes	No
)	9.02.05(b)(2)(i)		a)	an artificial or natural boundary which surrounds active portions of the facilityand,	ves)	No No
	9.02.05(b)(2)(ii)		b)	A means to control entry at all times, i.e., gates, attendants, locked entrances, etc.?	Yes	No
	9.02.05(c)	6.	act act	ess the TSD facility have a restricted ess sign posted at each entrance to the ive portion of the facility? (an example ald be: "Danger - Unauthorized Personnel p Out!") If so,	Yes	No
			a).	Is the sign legible from a distance of 25 feet?	Yes	No
)			b)	Is the sign in English or any other foreign language predominant to the geographical area?	Yes	No
	9.02.06(ъ)(1)	7.	s cleque	es the TSD facility have a written hedule for inspecting all emergency sipment, security devices, and operating is structural equipment, important to the evention, detection or response to vironmental/human health emergencies?	not insper- used how Yes	cted daily ally on the
	9.02.06(d)	8.	the dat	es the facility have an inspection log for a items in question #7 that includes the ce, time of inspection, observations made, inspector's initials?	Yes	No /
	9.02.07(d)(1)	9.	iol	es the TSD facility maintain a record of b titles for personnel that are involved the hazardous waste management?	Yes	No

ŀ	
9.02.07(d)(1)	10. Does the TSD facility have the name of the employee filling each position in hazardous waste management?
9.02.07(d)(2)	11. Does the TSD facility have on record a written position description of each job title noted in Question #9?
9.02.07(a)	12. Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures?
9.02.07(d)(3)	13. Does the facility presently maintain a written description of the type and amount of introductory and continuing training for those employees noted in Question #7? Yes
9.02.07(d)(4)	14. Does the facility have records to document this training?
9.03.02	15. *At the TSD facility, is the following equipment installed:
9.03.02(a)	a) An internal communications or alarm system capable of providing immediate emergency instructions to facility personnel if the hazardous waste storage area is threatened by fire or explosion? Yes No
9.03.02(b)	b) A device at the scene of hazardous waste TSD operations capable of summoning emergency assistance from Police, Fire departments, etc.? Yes No
9.03.02(c,d)	c) Fire control equipment and an adequate supply of fire fighting water or fire supression chemicals?
9.04	16. Does the facility have a contingency plan X see comment which contains the following elements:
9.04.02(a)	a) A detailed description of emergency procedures which facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, and water? Yes No
9.04.02(c)	b) A detailed description of arrangements formally agreed to by local polic, fire departments, and State and local emergency teams to provide assistance during emergency situations? (if such arrangements are refused, documentation

arrangements are refused, documentation of the refusal is sufficient). Yes

Νo

9.04.02(d)	c) A listing of names, addresses, and phonumbers of the TSD facility emergent response coordinators? Note: This listing should include name and phone numbers of emergent coordinators available on twenty-for hour basis.	cy Yes No es cy
9.04.02(e)	d) A list of appropriate emergent equipment necessary to cope with emergencies at the TSD facility?	cy th Yes No
9.04.02(f)	e) *An evacuation plan for the TSD facili if Management believes such a plan is definite requirement for the particular TSD facility?	а
9.04.03	f) Are copies of the plan sent to the loc police and fire departments, hospita and emergency rescue team?	al 1, Yes No
9.04.05	17. Does the facility have at all times at lead one employee either on-call or on the si who is responsible for coordinating a emergency response measures?	te
	If so, please complete below: Name: Paul Baug Title: Plating Manage Telephone Number:	
9.04.08(a)	18. Does the TSD facility have a writt operating record which contains t following information:	en he
9.04.08(b)(1)	a) A description of and the quantity each hazardous waste received, and t method and date of treatment, storage disposal? (Required if off-si generation)	or/n
9.04.08(b)(2)	b) The location of each hazardous was within the facility and the quantity each location?	te at Yes No
9.04.08(ъ)(3)	c) Detailed records and results of was analyses and incineration trial tes performed on wastes coming into t facility? (Required if off-sigeneration)	ts he

	·	1
9.04.08(b)(4)	d) Detailed operating summary reports and description of all emergency incidents that required the implementation of the facility contingency plan?	ν/A Yes No
9.04.08(b)(5)	e) Detailed records and results of inspections performed on facility emergency equipment, TSD systems, and hazardous waste areas?	Yes No
9.04.08(b)(6)	f) Detailed monitoring, testing, and analytical data where required?	Yes No
9.06.03	19. Have the TSD facility operators prepared written closure plans?	Yes No
9.06.08	20. Have the TSD facility operators prepared written post closure plans?	N/A Yes No
9.04.07	21. Does the TSD facility receive hazardous waste from off-site generators? If yes, are the following procedures implemented:	Yes No
5.05	a) Manifest copies are signed and dated	Yes No
5.05.03	b) A copy is given to the transporter	Yes No
5.05.04 5.05.04	c) A copy is sent to the generator	Yes No
5.05.05	d) A copy is returned and filed at the TSD facility	Yes No
9.05	22. Does the facility owner utilize surface impoundments, landfills or land treatment technologies?	Yes No
9.05	23. If yes, has the owner implemented a groundwater monitoring program?	Yes No
	24. Has an annual report been filed?	Yes No Mc
	MUST BE OBSERVED	
	25. The inspector should check for the following conditions at the TSD facility:	<u>-</u>
9.02.08(a)	a) Open fires	Yes No

9.02.08(b)(4) 9.08.02

9.02.08(b)(2,3)

9.02.08(a)

a) Open fires

b) Fumes or gases

Yes

Yes

c) Leaks or corrosion in containers or other storage structures

9.02.08(b)(5) 9.03.01	d) Leachate to receiving streams	Yes	NO NA
9.03.01	e) Malfunction of equipment	Yes	No
9.08.02	f) Bulging drums	Yes	No
9.02.08(Ъ)(1)	g) Excessive heat generation from storage facilities, lagoons, storage piles, etc.	Yes	No
9.03.05	26. *Does the TSD facility have adequate aisle space to allow the unobstructed movement of personnel and equipment during emergencies?	Yes	No
	27. Please provide detailed comments on specific problems encountered during the TSD facility inspection. For instance, industry requests for clarification of specific rules and regulations and their applicability at the facility can be noted below or described in a separate memo attached to the inspector's checklist.		
	comment #1 - There is no danger	ray	\sim
	This waste in case of fine.	$\overline{}$	
	it is dry, the material can't		
	spilled onto the water. The		
	storage area is insido, and	٧	
	therefore can not be relocated	•	
. *	into the air, water, or land	•	
			٠

Inspector's Name: John Lynn Cross
Title: Public Health Engineer
Agency: Va. State Health Dept., Div. of Solid & Hazardous Waste Mgt.
Office Location: 109 Governor Street, Richmond, VA 23219
Date of Inspection: & A. 1982
Inspector's Name:
Title:
Agency: Va. State Health Dept., Div. of Solid & Hazardous Waste Mgt.
Office Location: 109 Governor Street, Richmond, VA 23219
Date of Inspection:

7

CHECKLIST FOR RCRA INSPECTION OF USE AND MANAGEMENT OF CONTAINERS

RO USE

Name of Facility: Rohring Antonnotional	Inspection file
al de la companya de	Inspection rire
Address: 901 N. Rommandy 5t.	No.
Richmond, Va. a3220	Reviewer
EPA Generator ID Number: VAD 089 038 377	Date reviewed
Facility Inpsection Representative: Paul Bours	Form "I" (VA)
Title: Plating Monage	,
Telephone Number: (804) 355 - 7864	
The questions contained in this checklist apply to owners a	

The questions contained in this checklist apply to owners and operators of all hazardous waste facilities that store containers of hazardous waste, except as Section 9.01 provides otherwise.

Va. HWM Regs.	
9.08.02	1. Are all containers in good condition, i.e., not showing signs of leakage or corrosion or any other deterioration/deformation? Yes No
9.08.03	2. Are containers lined or made of materials compatible with hazardous wastes placed into them so that the container will not react or corrode with the hazardous wastes? (Yes) No
9.08.04(a)	3. Are all containers holding hazardous waste kept closed during storage? Yes No
9.08.05	4. Are areas where hazardous waste containers are stored inspected by the owner/operator at least once a week? Yes No
9.02.06(b)(1) 9.02.06(d)	5. Is an inspection log maintained? (See question #5 of TSD checklist.) Yes No
9.08.06	6. Are containers holding ignitable or reactive waste located at least 50 ft. from the facility's property line? Yes No
9.08.07(a)	7. Are incompatible wastes placed in the same N/A container? (See Appendix 5 for examples.) Yes No
9.08.07(c)	8. Are storage containers holding hazardous wastes which are incompatible with nearby materials stored in containers, tanks, piles, or surface impoundments separated by dikes, berms, walls, or other devices? Yes No

Inspector's Name: Jorni Lynn Cress
Title: Public Hoalth Engineer
Agency: Va. State Health Dept., Div. of Solid & Hazardous Waste Management
Office Location: 109 Governor Street, Richmond, VA 23219
Date of Inspection: L.d. 21,1982
Inspector's Name:
Title:
Agency: Va. State Health Dept., Div. of Solid & Hazardous Waste Management
Office Location: 109 Governor Street, Richmond, VA 23219
Date of Inspection:

ATES ENVIRONMENTAL PROTECTION AGENCY Region III - 6th & Walnut Sts.

Philadelphia, Pa. 19106

JECT: RCRA Inspection- Rehrig International

DATE: O

14:

Harry J. Weber, Environmental Scientist Harry J. Weber, Environmental Scientist Superfund/RCRA Compliance Section (3AW23)

FILE

Thru:

Walter E. Lee, Chief Superfund/RCRA Compliance Section (3AW23)

THE STATE IS TAKING ACTION TO RESOLVE THE VIOLATIONS IN THIS INSPECTION REPORT.

WE WILL MONITOR THE STATE ACTIVITY REGARDING RESOLUTION OF THESE VIOLATIONS.

CHECKLIST FO	R RCRA INSPECTION OF GENERATORS	RO USE
Name of Facility:	S	Inspection file
Address: 901	N. Lombardy St.	No
Pichm	,	Reviewer
		Date reviewed:
EPA Generator ID Num	DET.	Form "A" (VA)
Facility Inspection	Representative: Paul Baug	
Title: Plating		
Telephone Number: (804),355-7864	
VA HWM Regs.	Please provide a brief narrative exp the type of work activity that occur generator.	s at the
	manufacture of shopping	
	carts and nickel-chro	mo_
	slating of the carts.	in the second se
	4 0 0	and the second second second second second second
	2. Does the generator dispose of its wa	stes:
	a) On-site? (Circle one or both)	
	(b) Off-site?	
	Note: If on-site, then checklist for generator and TSD facility must be of if on-site more than 90 days.	completed
	3. What is the amount (in kilograms) or as appropriate, of:	
3.03.01	a) Hazardous waste produced per the generator facility? 1760	KIIUGI dab
3.03.02	b) Hazardous waste accumulated generator facility at an kilograms 270 drums	y lime.
3.03.03.(a,b)	c) Any commercial chemical promanufacturing chemical inte having the generic name listed Part 261.33(e) or any off-speci	in 40 CFR

commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in 40 CFR Part 261.33(e) which is discarded each month or is accumulated at any time for discarding? kilograms

- d) Containers identified in 40 CFR Part 261.33(c) larger than 20 liters in capacity that are discarded each month or are accumulated at any time for discarding? (number)
- e) Inner liners from containers identified under 40 CFR Part 261.33(c) that is discarded each month or is accumulated for discarding? kilograms
- f) Any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in 40 CFR Part 261.33(e) that is discarded each month or is accumulated at any time for discarding?

If the amount of (c) and (d) is less than 1, the amount of (e) is less than 10, the amount of (f) is less than 100, and the amount of (a) and (b) is less than 1000, then the facility qualifies as a small quantity generator and Form C should be completed instead of Form A.

4. What categories of hazardous wastes originate at the generator's facility? Please circle yes or no.

a) Ignitable wastes

b) Reactive wastes

c) Corrosive wastes

d) EP Toxic wastes

e) RCRA Listed Waste

5. Is the generator presently:

a) Treating hazardous waste?

Yes (N

Yes (

Yes No

Yes No

Yes

No

Yes No

3.03.03.(c)

3.03.03(d)

3.03.03(e)

3.07

3.09

3.08

3.10

3.11

6.

7.

	b)	Storing hazardous waste?	Yes	No
	c)	Disposing hazardous waste?	Yes	No
5	proinsp 'RCR was	: if the generator performs any of the vities noted in Question #5 [except as vided for at 9.01(c)(7)], then the pector must complete Form B, entitled A Checklist for inspection of hazardous te treatment, storage and disposal lities."		
	at t	manifest system currently in operation the generator's facility so that off-site oment of hazardous wastes can be tracked?	non off Yes	e suti
	Plea the	ase inspect the generator's manifest for following information:		
	a)	Is the TSD facility which receives a generator's hazardous waste identified by name, address, telephone number, and EPA ID number?	Yes	No
	ъ)	Is a serialized manifest document number included on the form?	Yes	No
	c)	Are the generator's name, address, telephone number and EPA ID number included on the form?	Yes	No
	d)	Are the name, address, telephone number, and EPA identification number of each transporter included on the form?	Yes	No
	e)	Is a description of the generator's hazardous waste to be treated, stored, or disposed included on the manifest?	Yes	No
	f)	Are the quantity of each waste, byunits of weight or volume, and the typeand number of containers loaded in the transport vehicle included on the manifest form?	Yes	No
	g)	Is the following certification noted on the generator's manifest form and is the certification acknowledged by the		

5.04.06

6.04

5.04.03(c)

5.04.02

5.04.03(a)

5.04.03(b)

5.04.04

5.04.05

"This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled

generator's signature?

			and are in proper condition for transportation according to the available regulations of the DOT and EPA."
	5.04.07		h) Are there adequate copies of the manifest available for generator, transporter, and TSD's? Yes No
	6.05.05	8.	Is hazardous waste being accumulated on-site by the generator for less than 90 days? If yes,
	6.05.05(a)(3)		a) Is the date accumulation of waste began clearly marked on each storage container? Yes No
	6.05.05(a)(2)		b) Are storage containers in good condition, i.e., no corrosion, leaking, or structural deformations? Yes No
	6.05.05(a)(4)		c) At the time of accumulation, are the storage containers clearly labeled as containing a particular hazardous waste in accordace with DOT regulations? Yes No
	9.04.01(a)	9.	Does the generator have an established hazardous wastess contingency plan to deal with emergencies dry cake - can't spill that may impact hazardous waste currently in so not Hammable storage at the facility? Yes No
)	9.02.07(a)	10.	Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures? Yes
	9.02.07(d)(1)	11.	Does the generator facility maintain a record of job titles for personnel that are involved with hazardous waste management and the name of the employee filling each job? Yes
	9.02.07(d)(2)	12.	Does the generator facility have on record a written position description for each job title noted in Question #11?
	9.02.07(d)(3)	13.	Does the facility presently maintain a written description of the type and amount of introductory and continuing training for those employees noted in Question #11? Yes No
	9.03.02	14.	*At the generator facility, is thefollowing equipment installed:
	9.03.02(a)		 a) An internal communications or alarm system capable of providing immediate

system capable of providing immediate

personnel if the hazardous waste storage area is threatened by fire or explosion?

No

b) A device at the scene of hazardous waste 9.03.02(b) generator operations capable of summoning emergency assistance from Police, Fire departments, etc.?

No

9.03.02(c,d)

c) Fire control equipment and an adequate supply of fire fighting water or fire suppression chemicals?

No (Yes

9.03.05

*Does the generator facility have adequate 15. aisle space to allow the unobstructed movement of personnel and equipment during emergencies?

No

9.04

Does the facility have a contingency plan does not have 16. which contains the following elements:

No

9.04.02(a,b)

a) A detailed description of emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, and water?

Yes

9.04.02(c)

b) A detailed description of arrangements formally agreed to by local police, fire departments, and state and local emergency teams to provide assistance during emergency situations?

Yes No

9.04.02(d)

c) A listing of names, addresses, and phone numbers of the generator facility emergency response coordinators?

No Yes

Note: This listing should include names and phone numbers of emergency coordinators available on twenty-four hour basis.

d) A list of appropriate emergency equipment necessary to cope with emergencies at the generator facility?

No Yes

9.04.02(f)

9.04.02(e)

*An evacuation plan for the generator facility if Management believes such a plan is a definite requirement for their particular generator facility.

No Yes

17. Please provide detailed comments on specific problems encountered during the inspection. For instance, industry requests for clarification of specific RCRA rules and regulations and their applicability at the facility can be noted below or described in a separate memo attached to the inspector's checklist.

Hore is modanger from the it is dry, waste, in case of fire a line it is dry, the material count be specified onto the waster. The stronge area is inside, and therefore can not be released into the air, note, or land.

Inspector's Name: Jone Lynn Con
Title: Public HeriOth Engineer
Agency: Va. State Health Dept., Div. of Solid & Hazardous Waste Management
Office Location: 109 Governor Street. Richmond. VA 23219
Date of Inspection: Sept. 21, 1982
Inspector's Name:
Title:
Agency: Va. State Health Dept., Div. of Solid & Hazardous Waste Management
Office Location: 109 Governor Street, Richmond, VA 23219
Date of Inspection:

CHECKLIST FOR	RCR DISP	A INSPECTION OF TREATMENT, R	o use		
		<u> </u>	Inspection	r File	
			No •		
Pichm			Reviewer_		
EPA ID Number: YA			Date revi	ewed	
		esentative: Roy Bays	Form "B"	(VA)	
Title: Platino		•			
Telephone: 1804	\sim	355-7864			
Telephone: (OO)					
SITE CHARACTERIZATI	8	Please denote if the facility particles, or disposes of hazardous wast appropriate sub-category that occurs facility.)	e. Also,	mark c	
TREATER		STORER	DISPOSE	R	
Filtration Incineration Thermal Reduction Recycling/Recove Chem/Phys/Bio Tr Reprocessing Solvent Recovery Other	ery reatm	Surface Impoundment Drum Above ground tank(s) In the state of the s	andfill op and treatm arface Imp acineration ther	ent oundmet	
VA HWM Regs.	INSE	ECTION PROCEDURE			
VA nwn Regs.		Does the facility generate hazardous	wastes?	Yes	No
		Note: Please complete the gene checklist if TSD facility gene hazardous wastes which are disposed site.	nerates		
9.02.03(a)	2.	Does the facility receive hazardou from a foreign source?	is waste	Yes	No
		If yes, has the facility notif Commissioner of the date of arrival?	ied the	Yes	No
9.02.04(a)	3.	For on-site tsd, does the facilit sufficient waste analysis?	y have a	Yes	No
9.02.04	4.	For off-site, does the facility place a waste analysis plan?	have in	Yes	No

Yes

9.02.04(a)(1)		a)	Does the plan enable facility personnel to identify hazardous wastes being handled by the facility?	Yes	No
9.02.04(b)(3)		b)	Does the plan enable facility personnel to confirm that wastes actually received at the TSD facility are the wastes indicated on the generator's manifest form?	Yes	No
9.02.05(b)(1)	5.	sur	oes the TSD facility have a 24-hour veillance system which monitors and trols entry to the active portion of the cility, including:	Yes	No
9.02.05(b)(2)(i)		a)	an artificial or natural boundary which surrounds active portions of the facilityand,	Yes	No No
9.02.05(b)(2)(ii)		ъ)	A means to control entry at all times, i.e., gates, attendants, locked entrances, etc.?	Yes	No
9.02.05(c)	6.	act act	ces the TSD facility have a restricted cess sign posted at each entrance to the live portion of the facility? (an example ald be: "Danger - Unauthorized Personnel op Out!") If so,	Yes	No
		a).	Is the sign legible from a distance of 25 feet?	Yes	No
· · · · · · · · · · · · · · · · · · ·		ъ)	Is the sign in English or any other foreign language predominant to the geographical area?	Yes	No
9.02.06(ъ)(1)	7.	s c equ	es the TSD facility have a written hedule for inspecting all emergency uipment, security devices, and operating d structural equipment, important to the evention, detection or response to vironmental/human health emergencies?	map	written ke ctod dail ally on H
9.02.06(d)	8.	th da	es the facility have an inspection log for e items in question #7 that includes the te, time of inspection, observations made, d inspector's initials?	Yes	No /

9. Does the TSD facility maintain a record of job titles for personnel that are involved with hazardous waste management?

9.02.07(d)(1)

9.02.07(d)(1)	10.	Does the TSD facility have the name of the employee filling each position in hazardous waste management?	Yes No
9.02.07(d)(2)	11.	Does the TSD facility have on record a written position description of each job title noted in Question #9?	Yes No
9.02.07(a)	12.	Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures?	Yes No
9.02.07(d)(3)	13.	Does the facility presently maintain a written description of the type and amount of introductory and continuing training for those employees noted in Question #7?	Yes No
9.02.07(d)(4)	14.	this training?	Yes No
9.03.02	15.	*At the TSD facility, is the following equipment installed:	
9.03.02(a)		a) An internal communications or alarm system capable of providing immediate emergency instructions to facility personnel if the hazardous waste storage area is threatened by fire or explosion?	Yes No
9.03.02(b)		b) A device at the scene of hazardous waste TSD operations capable of summoning emergency assistance from Police, Fire departments, etc.?	Yes No
9.03.02(c,d)		c) Fire control equipment and an adequate supply of fire fighting water or fire supression chemicals?	Yes No
9.04	16.	Does the facility have a contingency plan which contains the following elements:	* use comment!
9.04.02(a)		a) A detailed description of emergency procedures which facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, and water?	Yes No
9.04.02(c)		b) A detailed description of arrangements formally agreed to by local polic, fire departments, and State and local emergency teams to provide assistance during emergency situations? (if such arrangements are refused, documentation of the refusal is sufficient).	

9.04.02(d)		c) A listing of names, addresses, and phone numbers of the TSD facility emergency response coordinators? Note: This listing should include names and phone numbers of emergency coordinators available on twenty-four hour basis.	Yes	No
9.04.02(e)		d) A list of appropriate emergency equipment necessary to cope with emergencies at the TSD facility?	Yes	No
9.04.02(f)		e) *An evacuation plan for the TSD facility if Management believes such a plan is a definite requirement for their particular TSD facility?	Yes	No
9.04.03		f) Are copies of the plan sent to the local police and fire departments, hospital, and emergency rescue team?	Yes	No
9.04.05	17.	Does the facility have at all times at least one employee either on-call or on the site who is responsible for coordinating all emergency response measures?	Yes	No
		If so, please complete below:		
		Name: Paul Baug		
•		Title: Plating Manager		
		Telephone Number:		
9.04.08(a)	18.	Does the TSD facility have a written operating record which contains the following information:		
9.04.08(b)(1)		a) A description of and the quantity of each hazardous waste received, and the method and date of treatment, storage or disposal? (Required if off-site generation)	∕/ Yes	/A No
9.04.08(b)(2)		b) The location of each hazardous waste within the facility and the quantity at each location?	Yes	No
9.04.08(b)(3)		c) Detailed records and results of waste analyses andincineration trial tests performed on wastes coming into the facility? (Required if off-site generation)	Yes	No.

Form "B"

Yes

	•	.
9.04.08(b)(4)	d) Detailed operating summary reports and description of all emergency incidents that required the implementation of the facility contingency plan?	ν/A Yes No
9.04.08(b)(5)	e) Detailed records and results of inspections performed on facility emergency equipment, TSD systems, and hazardous waste areas?	Yes No
9.04.08(b)(6)	f) Detailed monitoring, testing, and analytical data where required?	Yes No
9.06.03	19. Have the TSD facility operators prepared written closure plans?	Yes (No)
9.06.08	20. Have the TSD facility operators prepared written post closure plans?	N/A Yes No
9.04.07	21. Does the TSD facility receive hazardous waste from off-site generators? If yes, are the following procedures implemented:	Yes No
5.05	a) Manifest copies are signed and dated	Yes No
5.05.03	b) A copy is given to the transporter	Yes No
5.05.04 5.05.04	c) A copy is sent to the generator	Yes No
5.05.05	d) A copy is returned and filed at the TSD facility	Yes No
9.05	22. Does the facility owner utilize surface impoundments, landfills or land treatment technologies?	Yes No
9.05	23. If yes, has the owner implemented a groundwater monitoring program?	Yes No given to
	24. Has an annual report been filed?	(Yes) No
	MUST BE OBSERVED	
	25. The inspector should check for the following conditions at the TSD facility:	
9.02.08(a)	a) Open fires	Yes No
9.02.08(b)(2,3)	b) Fumes or gases	Yes (No)

c) Leaks or corrosion in containers or other storage structures

9.02.08(b)(4) 9.08.02

9.02.08(b)(5) 9.03.01	d) Leachate to receiving streams	Yes	No
9.03.01	e) Malfunction of equipment	Yes	No
9.08.02	f) Bulging drums	Yes	No
9.02.08(b)(1)	g) Excessive heat generation from facilities, lagoons, storage pile		No
9.03.05	26. *Does the TSD facility have adequat space to allow the unobstructed move personnel and equipment during emerge	ment of \sim	No
	27. Please provide detailed comments on s problems encountered during the TSD f inspection. For instance, industry r for clarification of specific rul regulations and their applicability facility can be noted below or descr a separate memo attached to the inspechecklist.	acility equests es and at the ibed in	
	Comment #1 - There is no of for	9	
	it is dry, the material		
	spilled onto the water.		
***************************************	therefore can not be no	,	
	into the air, water, or	•	
		CALL COMPANY OF THE PARTY OF TH	
		aminimi, and an analysis and a	

Inspector's Name: John Lynn Cross
Title: Public Health Engineer
Agency: Va. State Health Dept., Div. of Solid & Hazardous Waste Mgt.
Office Location: 109 Governor Street, Richmond, VA 23219
Date of Inspection: 21 1982
Date of Inspection:
Inspector's Name:
Title:
Agency: Va. State Health Dept., Div. of Solid & Hazardous Waste Mgt.
Office Location: 109 Governor Street, Richmond, VA 23219
Date of Inspection:

CHECKLIST FOR RCRA INSPECTION OF USE AND MANAGEMENT OF CONTAINERS

RO USE

Name of Facility	: Rehrig International	Inspection file
Address: 901	N. Rombardy 5t.	No
_	d 1/ 3 1	Reviewer
		Date reviewed
4		Form "I" (VA)
Title: Plati	ng Managa	•
Telephone Number	(804) 355 - 7864	
	·	
The questions con hazardous waste f Section 9.01 prov	ntained in this checklist apply to owners an facilities that store containers of hazardous vides otherwise.	d operators of all s waste, except as
Va. HWM Regs.		
9.08.02	l. Are all containers in good condition not showing signs of leakage or corros any other deterioration/deformat	sion or
9.08.03	2. Are containers lined or made of mat compatible with hazardous wastes place them so that the container will not recorrode with the hazardous wastes?	ed into
9.08.04(a)	3. Are all containers holding hazardous kept closed during storage?	waste Yes No
9.08.05	4. Are areas where hazardous waste conta are stored inspected by the owner/op at least once a week?	
9.02.06(b)(1) 9.02.06(d)	5. Is an inspection log maintained? question #5 of TSD checklist.)	(See Yes No
9.08.06	6. Are containers holding ignitable or re waste located at least 50 ft. fro facility's property line?	
9.08.07(a)	7. Are incompatible wastes placed in the container? (See Appendix 5 for exampl	
9.08.07(c)	8. Are storage containers holding haza wastes which are incompatible with materials stored in containers, t piles, or surface impoundments separadikes, berms, walls, or other devices?	earby anks,

Inspector's Name: Jorni Linn Cross
Title: Public Hoalth Engineer
Agency: Va. State Health Dept., Div. of Solid & Hazardous Waste Management
Office Location: 109 Governor Street, Richmond, VA 23219
Date of Inspection: 10d. 21,1982
Inspector's Name:
Title:
Agency: Va. State Health Dept., Div. of Solid & Hazardous Waste Management
Office Location: 109 Governor Street, Richmond, VA 23219
Date of Inspection:

APRIL 21, 1986 LETTER FROM REHRIG INTERNATIONAL TO USEPA

REHRIG INTERNATIONAL

RICHMOND PLANT

901 North Lombardy Street Richmond, Virginia 23220

(804) 355-7864

April 21, 1986

US. E.P.A. Region III

ATTN: Mary Beck (3HW31) 841 Chestnut Building Philadelphia, PA 19107

Dear Ms. Beck:

I, Paul Bauz, Plating Manager for Rehrig International, Incorporated, hereby certify that I talked to Ms. Mary Beck on April 21, 1986 and was assured of a 30 day extension to provide information as requested in the "S.W.M.U." letter dated February 24, 1986.

Sincerely,

Paul Bauz

Plating Manager

cc: D.P. Goodell

Attachments: two copies

KERN

MAY 20, 1986 LETTER FROM REHRIG INTERNATIONAL TO USEPA

SWMU RESPONSE

REHRIG INTERNATIONAL

RICHMOND PLANT

901 North Lombardy Street Richmond, Virginia 23220

(804) 355-7864

Certified Mail - Return Receipt Requeste

May 20, 1986

Environmental Protection Agency Region III 841 Chestnut Building Philadelphia, PA 19107

Ms. Mary Beck ATTN:

S.W.M.U. Disclosure (2 copies enclosed)

Rehrig International, Inc.

VAD 08-902-8377

Dear Ms. Beck:

The following is in response to your letter dated February 24, 1986:

(1). TOPOGRAPHIC MAP

As of this date we have not received the 7½ minute quad sheet from the Dept. of Interior. Attached are copies of our application. We will expedite the map to you immediately upon our receipt of it.

HISTORY OF BUILDING

The building was originally built in 1904 by Export Leaf Tobacco Company and was used as a tobacco leaf storage facility until 1977. Building was purchased in 1977 Bowe Street Associates, 1506 Bloomfield Road, Richmond, VA 23225. The building remained vacant from 1977 until 1979 when Rehrig International leased a portion of the building. Prior to the installation of Rehrig International's chrome plating line in 1980, there were no former solid waste units located in this building. The following is a history of Rehrig International's occupation of the building (please refer to attached plant layout):

7-1-79 to 2-1-80 Bays A1, B1, B2, & B3.

2-1-80 to 5-1-82 5-1-82 to 7-1-83 В. == Add Bay A2.

= Add Bay A3.

7-1-83 to PRESENT Add Bay's A4, A5, A6, B4, B5, B6, B7, & B8.

Rehrig International presently leases the entire building.



(2). <u>UNIT'S FUNCTION</u>: To receive waste water from the chrome plating operation and to pretreat for removal of metals from the nickel chrome plating operation.

MATERIAL OF CONSTRUCTION: Specially lined pit 10 ft. x

10 ft. x 10 ft. From this pit the water is pumped through a series of lined tanks, the last tank having a baffle for collecting sludge. Then the water is pumped through a filter press.

DIMENSION CAPACITY & ANCILLARY PIPING:

All piping is CPVC, schedule 80. Capacity is 30 gallons per minute.

ENGINEERING DRAWINGS: None Available.

(3). <u>DESCRIPTION OF SOLID WASTE</u>: Waste water from nickel chrome plating operation.

QUANTITIES: Annual quantity of waste water passing through system is approximately 6500 ccf.

DATES OF OPERATION: Continually with the plating operation.

D.P. Goodell

Yours

Vice President, General Manager

Enclosures

cc: Paul Bauz

Plating Manager

LEL/vc

		444 sq. ft. reas B1-B3)	** 1"=\$1+40**KEMIKE	
	D1			
	В2		9,335 sq. ft. A2	
•	В3		9,335 sq. ft. A3	
, ,	8,431 sq. ft. B4		8,840 sq. ft. A4	
Lombardy Street	8,431 sq. ft. B5		8,755 sq. ft. A5	Bowe Street
	8,431 sq. ft. B6		8,840 sq. ft. A6	Second Floor A6 Office-2,132 sq. ft. Storage-6,800 sq. ft. (Day care)
	8,323 sq. ft. B7		`	
	8,323 sq. ft. B8		V.	orth
		Total gr	round floor warehous	e - 128,486 sq. ft.

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

MAP ORDER BLANK

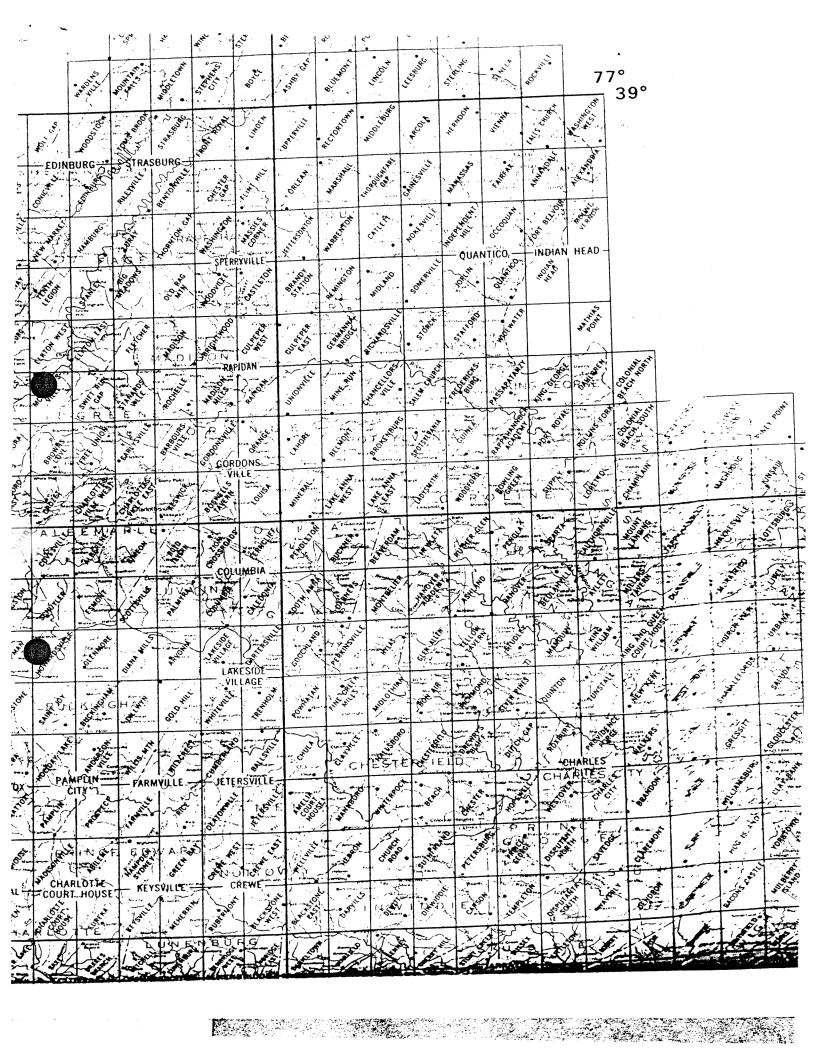
TO:	12	00 SOUT	LOGICAL SURVEY TH EADS STREET ON, VIRGINIA 22202		DATE:	4-29-86	
		ROM: Na	me REHRIG INTERNATIO	UNAL, I	NC,		
	Str	eet Address	901 N. LOMBARDY	ST			
	Cit	у	RICHMOND State	VA	Zip	Code 232	20
_			ALPHABETIZE map names in state groups. L	ist THEMATIC	maps by Alpha-	Numeric number.	
		Quantity	Map Name	State	Scale	Unit Price	Total Price
_	1	2	STANDARD TOPOGRAPHIC	•	-	\$	\$
-	2		QUANDRANGLE MAP	VA-	1:24,000'	250	5,00
_	3			RICHMOND		3.30	0,00
_	4						
	5		(Per area highlighted				
	6		(Per area highlighted)				
	7						
	8						
•	9		-PLEMSE RUSH-				
1	0		2 2				
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16	Γ						
	- J		- Remittance payable to Dept.	of the In	terior-11505	Total	5.00
			for PROMPT ACCURATE SHIPMENT DIE				3.00

FROMPT, ACCURATE SHIPMENT PLEASE FILL IN THE FOLLOWING LABEL
Please PRINT or TYPEWRITE

U.S. GEOLOGICAL SURVES

1200 South Eads seet
Arlington, Vision 22202

Nam-	RELICIE IN	Renon HONA	INC.		
Staset Address		LOMBARD	√ S₹	1 1 5 1 1 Sec. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Total Company of the second
City	KICHMONS		State V f	7	Zip Code 23220



PAY TO THE ORDER OF DEPT, J. STREET 15098

SOVRANBANK
Somen Bank, N.A. Richmond, Virginia 2281

FOR MILLIAN

10 200 910618

Source Sank, N.A. Richmond, Virginia 2281

FOR MILLIAN

10 200 910618

Amy Lewb

CHECKLIST FOR SWMU RESPONSES

NAME OF FACILITY Kehrige EPA ID No. VAD DE

DID THE FACILITY ST	HRMIT THE FOLLOWING	5 D A M A			
The location of all units (SWMUs) on the map was or her	l existing and form he facility propert	ner solid waste y (maps 1" = 20 mu'a ley 19	managem 00') Ma fre.	ent YES	NO
Construction design	n information of ea	a 7/1/bill not for	herenne	YES_	No
Information of the	waste handled at e	ach SWMU		YES	NO
Data and descriptio	ons of potential or	prior releases	from		
ach SWMU			x	YES	NO
Certification				YES	NO_/
Description/Number	of SWMUs (non RCRA	regulated)			
Land Disposal	- The same same	Incinerato	rs		
Land Treatment		Tanks	1 sit 4	- Itaniks S	fort.
Surface Imp.		Drums	Jenson		for nich
Other					
s there evidence of	f contamination				
Groundwater	YESNO				
Surface water	YESNO				
Air	YESNO				
PRIORITY	,				
HIGHReported ev	vidence of release	to air, ground	or surfa	ce wata	. r
MEDIUMNo releas		**			- L
LOWEverything e				•	
<i>U</i> -		<i>y</i>			

COMMENTS:

JULY 1, 1986

LETTER AND ENCLOSURE FROM COMMONWEALTH OF VIRGINIA DEPARTMENT OF WASTE MANAGEMENT TO REHRIG INTERNATIONAL



COMMONWEALTH of VIRGINIA

DEPARTMENT OF WASTE MANAGEMENT 11th Floor, Monroe Building 101 N. 14th Street Richmond, VA 23219 (804) 225-2667

CERTIFIED - RETURN RECEIPT REQUESTED

Larry E. Lewis
Rehrig International
901 N. Lombardy Street
Richmond, Virginia 23220

Re:

EPA ID # VAD089028377

Dear Mr. Lewis:

Enclosed is a copy of the inspection checklists for your facility completed on December 8, 1987, showing compliance with the Virginia Hazardous Waste Management Regulations.

If you have any questions, please call me at (804)225-2321.

Sincerely.

William J. Sarnecky, Chemical Engineer

Division of Technical Services

Enclosure

WJS:308/1hc

Name of Facility: REHIG I	NTERNATIONAL
Address: 901 NORTH Lon	
Bienmono, V	A 23220
	089028377
Facility Inspection Representative:	PAUL BAUZ
Title: PLATING MAN	
Telephone Number:(804) 355-78	
1. What is business activity of firm? recycling, etc.) MANUFACT	(i.e., furniture mfg., metal plating, TURE SHOPPING CARTS
2. Give brief description of waste strea F-006 Nickel-CHR	eme Protint Scroft,
a. Characteristic - Ignitable (D001) Corrosive (D002)	Generated, recycled and accumulated. (1) (1) (1) (1) (1) (1) (1) (1
Reactive (D003) EP Toxic (D004- D017) b. Listed (F, K, or U list) F-006	1700 0 1700 34,000 POUNDS
c. Listed (P)	
d. Waste from spills of P and U list	

4.	Based on the above information, the co	mpany is classified as:
	a. Small quantity generator exempt	from regulations. (Form C)
	b. Recycler not exempt from regulation	ons. (Form A)
	c. Generator. (Form A)	
5.	If facility treats, stores or disposexempt under § 9.).	es on-site complete Form B (unless
6.	Complete the apporpriate checklists.	
	Container (Form I) Surface Impoundment (Form K) Landfill (Form N)	Tank (Form J) Incineration & Thermal Treatment (Form O & P) Physical, Chemical & Biological
_		Treatment (Form Q)
7.	Comments:	
		_
	LAST SHIPMENT OF L	UASTE IN DRUMS WAS 9-12-83
		CLEANED IN AUGUST
		CLEANED IN AUGUST
	PROCESS PLATING TANKS	CLEANED IN AUGUST
	PROCESS PLATING TANKS AND 39,743 lbs WERE S	(LEANED IN AUGUST SHIPPED ON 8/21/87,
 Ins	PROCESS PLATING TANKS	(LEANED IN AUGUST SHIPPED ON 8/21/87,
	PROCESS PLATING TANKS AND 39,743 lbs WERE S	(LEANED IN AUGUST SHIPPED ON 8/21/87,
Age	PROCESS PLATING TANKS AND 39,743 Ibs WERE S spector's Name: William S tle: CAEMICAL D	CLEANED IN AUGUST SHIPPED ON 8/21/87, ARNECKY ENGINEER

CHECKLIST FOR RCRA INSPECTION OF GENERATORS

Name of Facility:			DEHIG INTERNATIONAL		
Address:	·····		701 NORTH LOMBARDY STREET)	
			RICHMOND, VA 23000		
EPA Generator ID N	Numbe				
Facility Inspection	n Re	pre	sentative: PAUL BAUT		
Title:		F-	ATING MANAGER		
Telephone Number:_			804) 355-7864		
VA HWM Regs. Reference:					-
6.3	1.	ge	a manifest system currently used by the nerator so that off-site shipment of cardous wastes can be tracked?) No
	2.		the following included on the generators ifest?		
5.3.B.1.		a)	The generator's name, address, telephone number and EPA ID number.	Yes	No
5.3.B.2.		b)	A unique five digit number assigned to this manifest by the generator.	Yes	No
5.3.B.3.		c)	Total number of pages used to complete the manifest.	Yes	No
5.3.B.4.		d)	The company name and EPA identification of each transporter.	Yes	No
5.3.B.5.		e)	The company name, site address and the EPA ID number of the facility designated to receive the waste listed on the manifest.	Yes	No
5.3.B.6.		f)	The U.S. DOT description of each waste to include its proper shipping name, hazard class, and ID number (UN/NA), as identified in the Virginia Regulations Governing the Transporation of Hazardous Materials.	Yes	No

5.3.B.7.		g) The units of weight or volume and the type and number of containers loaded in the transport vehicle included on the manifest form?	s No
5.3.B.8.		h) In case of international shipment, the point of departure (city & state) for those shipments destined for treatment, storage, and dispoal outside the jurisdiction of the United States.	es No
5.3.C.		 The following certification noted on the generator's manifest form and is the certification acknowledged by the generator's signature. 	
		"I hereby declare that the content of this consignment are fully and accurately discribed above by proper shipping name and are classified packed,	が変換を変われている。
		marked, and labled, and condition for transport by [mode of transportion] according to applicable international and national governmental regulations."	s No
6.5.C.2.	3.	Have manifest been received from TSD for waste shipped over 45 days ago.	s) No
		if not, has the generator filed an exception report? MA Ye	s No
5.5.A.7.	4.	Did the generator determine that the transporter has a Virginia transporter permit?	No No
6.4.E.1.	5.	Is hazardous waste being accumulated on-site by the generator for <u>less</u> than 90 days? If yes,	s No
6.4.E.l.a.		a) Is the waste placed in either containers or tanks? (If yes, fill out appropriate checklist. If no, TSD permit is required.)	ом (а
6.4.E.1.b.		b) Is the date accumulation of waste began clearly and visibly marked on each container and, does it indicate accumulation for less than 90 days?	No

			Form	"A"
6.4.E.l.c.		c) During accumulation, are the storage containers and/or tank clearly labeled with the words Hazardous Waste?		No
9.1.G.1.	6.	Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures?		No
9.1.G.2.	7.	Have new employees to the facility successfully completed training mentioned above within 6 months of their employment or assignment to the facility?		No
9.1.G.3.	8.	Do personnel participate in an annual review of their initial training?	Yes	No
9.1.G.4.a.	9.	Does the facility maintain a record of:		Ž.
		(a) job titles for personnel that are involved with hazardous waste management; and	Yes	Ño
		(b) the name of the employee filling each job?	Yes	No
9.1.G.4.b.	10.	Does the facility have on record a written position description for each job title noted in Question #9?	Yes	No
9.1.G.4.c.	11.	Does the facility maintain a written description of the type and amount of introductory and continuing training for those employees involved in hazardous waste		
		management?	Yes	No
9.1.G.4.d.	12.	Does the facility have records to document this training?	Yes	No
9.2.B. 9.2.D.	13.	At the facility, is the following equipment installed:		
9.2.B.1.		a) An internal communications or alarm system capable of providing immediate emergency instructions to facility personnel if the hazardous waste storage area is threatened by fire or explosion?	Yes	No

9.2.B.2.		b) A device at the scene of hazardous waste generator operations capable of summoning emergency assistance from Police, Fire departments, etc.?	:	No
9.2.B.(3, 4)	(Portable fire extinguishers, fire control, spill control, and decontamination equipment and water at adequate volume and pressure to supply expected fire demands, foam producing equipment, automatic sprinklers or water spray system?		No
9.2.C.	·	s a record of tests and inspections of equired equipment (question 11) maintained t the facility?		No
9.2.F.	t	ooes the facility have adequate aisle space to allow the unobstructed movement of ersonnel and equipment during emergencies?	Yes	No
9.3.A.1. 6.4.E.1.d.	c s w	oes the facility have an established ontingency plan to deal with any unplanned udden or nonsudden release of hazardous aste or hazardous waste constituents to the ir, soil, groundwater or surface water?	Yes	No
9.3.		oes the contingency plan contain the ollowing elements:		
9.3.B.(1, 2)	a .	A detailed description of emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, and water?	Yes	No
9.3.B.4.	b)	A listing of names, addresses, and phone numbers of the generator facility emergency response coordinators? List primary coordinator. Name Paul Baur Title Furtire Manager	Yes	No
		Telephone 755-7864		

9.3.B.5.		c)	A list of appropriate emergency equipment necessary to cope with emergencies at the generator facility?		No
9.3.B.5.		d)	Does this list specify the location and physical description of each item on the list and a brief description of each item on the list, and a brief outline of its capabilities.	Yes	No
9.3.B.6.		e)	An evacuation plan for the generator facility where there is a possibility that evacuation could be necessary?	Yes	No
9.3.C.		f)	Have copies of the contingency plan been sent to all local police departments, fire departments, hospitals and Commonwealth and local emergency response teams? List: Richmon Fire Defi	Yes	No
			ESC POLICE "		
9.3.B.			1) Is there documentation to indicate the personnel listed above received the contingency plan?	(Vas)	No
9.3.F.(9, 10)			If the contingency plan has been implemented, was a written report filed with the Executive Director and were the Executive Director and other required authorities properly notified before operations resumed?	Yes	No
6.5.A.	18.	mani	the facility retain copies of all fests, annual reports, and test results at least three years?	Yes	No
6.5.B.	19.		the facility submitted an annual report the preceding calendar year?	Yes	No

20.	Comments	
		No cortes el telles controcam
Inspector's Name:	W. Miam SARNECKY	
Title:	CHEMICAL ENGINEER	
Agency: Department of W		
Office Location: 101 N. Richmo	Fourteenth St., 11th Floor Monroe Building nd, Virginia 23219	
Date of Inspection:	12-8-87	
Inspector's Name:		
Title:		
Agency: Department of Wa	aste Management	
Office Location: 101 N. Richmon	Fourteenth St., 11th Floor Monroe Building ad, Virginia 23219	
Date of Inspection:		

CHECKLIST FOR RCRA INSPECTION OF TREATMENT, STORAGE & DISPOSAL (TSD) FACILITIES

Name of Facility:		DEHIG LATERNATIONAL		
Address:		701 NORTH LOMEARDY STREET		
		RICHMONO, VA 23220	·	
EPA ID Number:		VAD 089028377		
Facility Inspection	n Rep	presentative: PAUL BAUZ		
Title:	ئر	PATING MANAGER		
Telephone: (<u>204</u>)		355-7864		
VA HWM Regs.				
Reference		The facility: treats, stores disposes (Circle as appropriate)	** 5.	
9.1.C.1.		Does the facility receive hazardous waste from a foreign source?	Yes	No
		If yes, has the facility notified the Commissioner of the date of arrival?	7 Yes	No
9.1.D.(1, 2, 3)		Does the facility have a detailed chemical and physical analysis of a representative sample of the waste?	Yes	ЙO
9.1.D.5.		Does the facility have a waste analysis plan which specifies the following:	Ye	Ño
·	•	a) the parameters for each hazardous waste;	Yek	No
	•	b) test methods for each parameter;	Yes	No
	, , , , , , , , , , , , , , , , , , ,	c) the sampling method used to obtain a representative sample;	(Ves)	No
en e		d) frequency to review initial analysis.	Yes	No
).l.D.6.	<u>)</u> 3 1	If the facility receives wastes generated off-site, does the plan specifiy procedures and sampling methods to ensure that the waste matches the identity of the waste designated on the accompanying manifest or shipping paper?	Yes	No
Cile.i.	6. 4	Will physical contact or disturbance of the waste injure unknowing persons or livestock?	Yes	No
	Table 1	f yes, does the TSD facility have:		

9.1.E.2.a.	a) a 24-hour surveillance system which monitors and controls entry to the active portion of the facility?	Yes	No
9.1.E.2.a.(1)	 an artificial or natural boundary which surrounds active portions of the facility? and, 		No
9.1.E.2.a.(2)	c) a means to control entry at all times? (i.e., gates, attendants, locked entrances, etc.)	Yes	No
9.1.E.3.	d) a restricted access sign posted at each entrance to the active portion of the facility?	Yes	No
	Is sign legible from a distance of 25 feet?	Yes	No
	Is sign in English and any other foreign language predominant to the geographical area?	Yes	No
9.1.F.2.a. 7.	Does the TSD facility have a written schedule for inspecting all equipment necessary for prevention, detection or response to environmental or human health hazards?	Yes	Ño
9.1.F.2.c.	a) Does the schedule identify the types of problems which are to be looked for during the inspection?	Yes	No
9.1.F.2.d.	b) Does the schedule include frequency of these inspections?	Yes	No
9-1.G-1. 8-	Have the facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures?	Yes	No
9.1.G.2. 9.	Have new employees to the facility successfully completed training mentioned above within 6 months of their employment or assignment to the facility?	(Vec)	No
9.1.G.3. 10.	Do personnel participate in an annual review of their intitial training?	Yes	No
9.1.G.4.a. 11.	Does the facility maintain a record of (a) job titles for personnel that are involved with hazardous waste management and (b) the name of the employee filling each job?	Yes	No

9.1.G.4.b.	12.	Does the facility have on record a written position description for each job title noted in Question #11?	Yes	No
9.1.G.4.c.	13.	Does the facility maintain a written description of the type and amount of introductory and continuing training for those employees involved in hazardous waste management?	Yes	Ño
9.1.G.4.d.	14.	Does the facility have records to document this training?	Yes	No
9.2.B. 9.2.D.	15.	At the facility, is the following equipment installed:		
9.2.B.1.		a) An internal communications or alarm system capable of providing immediate emergency instructions to facility personnel if the hazardous waste storage area is threatened by fire or explosion?	Yes	No
9.2.B.2.		b) A device at the scene of hazardous waste operations capable of summoning emergency assistance from Police, Fire departments, etc.?	Yes	No
9.2.B.(3, 4)		c) Portable fire extinguishers, fire control, spill control, and decontamination equipment and water at adequate volume and pressure to supply expected fire demands, foam producing equipment, automatic sprinklers or water spray system?	Yes	No
9.2.C.	16.	Is a record of tests and inspections of required equipment (question 15) maintained at the facility?	Yes	No
9.2.E.	17	Does the facility have adequate aisle space to allow the unobstructed movement of personnel and equipment during emergencies?	ves	No
9.3.4.1.	18.	Does the facility have an established contingency plan to deal with any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to the air, soil, groundwater or surface water that may impact hazardous waste currently in storage at the facility?	Yes	No
9.3.		Does the contingency plan contain the following elements:	÷	

9.3.B.(1, 2)	a)	A detailed description of emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, and		
9.3.B.3.	b)	water? A detailed description of arrangements formally agreed to by local police, fire departments, and state and local emergency teams to provide assistance during emergency situations?	Yes	No No
9.3.B.4. 9.3.E.	c)	A listing of names, addresses, and phone numbers of the generator facility emergency response coordinators? List primary coordinator.	Ŷes	No
		Name PAUL BAUZ Title PLATING MANAGER Telephone 355-7864	- 場合の機能の対象を	
9.3.B.5.	d)	A list of all required emergency equipment necessary to cope with emergencies at the generator facility?	Yes	No
9.3.B.5.	e)	Does this list specify the location and of each item on the list, and a brief description of each item on the list, and a brief outline of its capabilities?	Yes	No
9.3.C.	f)	Have copies of the contingency plan been sent to all local police departments, fire departments, hospitals and Commonwealth and local emergency response teams? List:	Yes	No
		RICHMOND FIRE DEPT	·, v (n ; -	
	·			

.3.B.

1) Is there documentation to indicate the personnel listed above received the contingency plan?

Yes

No

	9.3.F.(9, 10)		g) If the contingency plan has been implemented, was a written report filed with the Commissioner and were the Commissioner and other required authorities properly notified before operations resumed?	Yes	No
	9.3.D.	20.	Have any amendments of the contingency plan been necessary? If yes, explain in comment section.	Yes	No
	9.4.B.2.e. 5.4.E.1.	21.	Does the facility retain copies of all manifests, and inspection results for at least three years?	Yes	No
		22.	Does the TSD facility receive hazardous waste from off-site generators?	Yes	No
	9.4.A.		If yes, has the TSD determined:	-	
	5.5.C.2.a.		a) That manifests are completed, signed, and dated by the generator and each transporter for all shipments received NA	Yes	No
	5.5.C.2.b.		b) That the manifest copies are signed and dated	Yes	No
	5.5.C.2.d.		c) A copy has been given to the transporter	Yes	No
	5.5.C.2.e.		d) A copy has been sent to the generator N/A	Yes	No
	5.5.C.2.f.		e) A copy has been retained and filed at the TSD facility.	Yes	No
	9.4.B.	23.	Does the TSD facility have a written operating record which contains the following information:	,	
•		ž.	For facility receiving off-site hazardous		
		,	waste:		
مردونها مايعات	9.4.B.2.a.	·	a) A description of and the quantity of		
·			each hazardous waste received, and the method and date of treatment, storage or		•
			disposal? (Use Appendix 9.1)	Yes	No
			Storage,	• ' .	
			Treatment,		
		- *	Disposal,		
		-			=

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and the state of t

Yes

No

			TOLM	ב
	For	facilities disposing of hazardous waste:		
9.4.B.2.b.	ъ)	The location of each hazardous waste within the facility and the quantity at each location recorded on a map or diagram of each cell or disposal area?	y Yes	No
•	For	all TSD facilities:	***************************************	
9.4.B.2.c.	c)	Detailed records and results of waste analyses and incineration trial tests performed on wastes coming into the facility?	Yes	No
9.4.B.2.d.	d)	Detailed operating summary reports and description of all emergency incidents that required the implementation of the facility contingency plan?	(Te)	No
9.4.B.2.e. 9.1.F.4.	e)	Detailed records and results of inspections performed on facility emergency equipment, TSD systems, and hazardous waste areas?	Yes	No
9.4.B.2.f.	f)	Detailed monitoring, testing, and analytical data where required?	Yes	No
9.4.B.2.g.	g)	All closure cost estimates, and for disposal facilities all post-closure cost estimates? Closure Cost Estimate \$ 8 246	Yes	No
9.6.		the facility have a written closure which includes:		
9.6.C.1.b.	William Free	An estimate of the maximum waste inventory in storage or treatment at any time during life of facility?	Yes	No
9.6.C.1.e.	escalar and Carto Mayor Average	A description of steps that will be used to decontaminate facility equipment?	Yes	No
9.6.C.1.d.		An estimate of the expected year for closure?	Yes	No
9.6.C.1.d.	(b) (a)	A schedule for final closure?	Yes	No
		A copy of the closure plan given to the inspector? ON FILE AT OFFICE	Yes	No
9.7.C.		all TSD facilities, has financial rance for closure for this facility been		

established?

		Instrument(s) used:		
		Trust Fund Letter of Credit Performance Bond Financial Test Financial Guarantee Bond Certificate of Insurance Corporate Guarantee		
	26.	Has a copy of all related documents been forwarded to the Virginia State Department of Health?	Yes	No
		* Submittal Date		
		If no, was a copy of these documents provided to the inspector?	Yes	No
	,	If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	ЙО
		Date by which a copy of these documents is to be mailed.		
.7.G.	27	Has liability coverage for <pre>sudden</pre> accidential occurrences** been established for this facility?	Yes	No
		<pre>Instrument(s) used:</pre>		
		Certificate of Insurance Financial Test Liability Endorsement		
onere wordspool	28.	Has a copy of all related documents been forwarded to the Virginia State Department of Health?	Yes	No
	•	* Submittal Date 3-2/-87		
				فيد.

^{*} If the finanical test was used, all three (3) initially submitted items specified in § 9.7.C.5. must be updated within 90 days after the close of each succeeding fiscal year.

Sudden accidental occurrences: at least \$1 million per occurrence and \$2 million annual aggregate.

Non-sudden accidental occurrences: at least \$3 million per occurrence and \$6 million annual aggregate.

		If no, was a copy of these documents provided to the inspector?	Yes	No
		If no, will a copy of these documents be mailed to the Virginia State Department of, Health?	Yes	No
		Date by which a copy of these documents is to be mailed.		
9.6.H.	29.	For landfills, surface impoundments, waste piles and land treatment facilities, does the facilities have a written post-closure plan that includes:	7	
9.6.H.l.a.		a) Groundwater monitoring activities?	Yes	No
9.6.H.1.b.		b) Maintenance activities to ensure containment?	Yes	No
9.6.H.l.c.		c) Name, address, and phone number of contact during post-closure period?	Yes	No
		d) Post-closure cost estimate?	Yes	Ио
	<u>. </u>	Amount \$		
9.7.E.	30.		, 7 Yes	No
		<pre>Instrument(s) used:</pre>		
	· 许徐	Trust Fund Letter of Credit Performance Bond Financial Test Financial Guarantee Bond		
		Certificate of Insurance Corporate Guarantee		
	31.	Has a copy of all related documents been forwarded to the Virginia State Department of Health?	Yes	No
		* Submittal Date	• 1.	

^{*} If the finanical test was used, all three (3) initially submitted items specified in § 9.7.C.5. must be updated within 90 days after the close of each succeeding fiscal year.

		Form "	B"
	If no, was a copy of these documents provided to the inspector?	Yes	No
	If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	No
	Date by which a copy of these documents is to be mailed.	- 4	
9.7.G.2. 32.	For landfills, surface impoundments and land treatment facilities has liability coverage** for nonsudden accidental occurrences been established?	Yes	No
	Instrument(s) used:		
33.	Certificate of Insurance Financial Test Liability Endorsement Has a copy of all related documents been forwarded to the Virginia State Department of Health?	Yes	No
• •	* Submittal Date		
•	If no, was a copy of these documents provided to the inspector?	Yes	No
	If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	No
	Date by which a copy of these documents is to be mailed.		
9.5. 34.	For landfills, surface impoundments, wastepiles (if closed as landfills) and land treatment facilities, has a groundwater monitoring program been implemented?		No
9.4.D. 35.	Has an annual report been filed?	Yes	7 No
J • च • Þ •			

^{*} If the financial test was used, all three (3) initially submitted items specified in § 9.7.C.5. must be updated within 90 days after the close of each succeeding fiscal year.

Sudden accidental occurrences: at least \$1 million per occurrence and \$2 million annual aggregate.

Non-sudden accidental occurrences: at least \$3 million per occurrence and \$6 million annual aggregate.

36.	Comments:	
	·	
6		
Inspector's Name:	WILLIAM SAPNECKY	
Title:	WILLIAM SARNECKI CHEMICAN ENGINEER	
•	th Department, Bureau of Hazardous Waste Management	
Office Location: 101 N.	Fourteenth St., 11th Floor Monroe Building	Ė
Richmo	ond, Virginia 23219	
Date of Inspection:	12-8-87	Finds .
Inspector's Name:		
Title:		
Agency: Va. State Healt	h Department, Bureau of Hazardous Waste Management	
Office Location: 101 N.	Fourteenth St., 11th Floor Monroe Building	
	ond, Virginia 23219	
Date of Inspection:	· · · · · · · · · · · · · · · · · · ·	

CHECKLIST FOR RCRA INSPECTION OF USE AND MANAGEMENT OF CONTAINERS .

Name of Facility:		KEA16 INTERNATIONAL		
Address:	9	OI NORTH LOMBARDY STREET		
		RICHMOND, VA 23220		
EPA Generator ID N	umbe			
Facility Inspection	n Re	presentative: PAUL BAUT		
Title:	P	ATING MANAGER		
Telephone Number:(80	4) 355-7864		
hazardous waste fa	cili	i in this checklist apply to owners and operate ties and generators accumulating less than 90 containers of hazardous waste, except as § 9.	days	(see
VA HWM Regs. Reference		:	\$	n.
9.8.B.	1.	Are all containers in good condition, i.e., not showing signs of leakage or corrosion or any other deterioration/deformation?	Yes	No
9.8.C.	2.	Are containers lined or made of materials compatible with hazardous wastes placed into them so that the container will not react or corrode with the hazardous wastes?	Yes	No
9.8.D.1.	3.	Are all containers holding hazardous waste kept closed during storage?	Yes	No
9.8.E.	Leifes.	Are areas where hazardous waste containers are stored inspected by the owner/operator at least once a week?	Yes	No
9.1.F.2.a. 9.1.F.4.	5.	Is an inspection log maintained? (See question #7 of TSD checklist.)	Yes	No
9.8.F.	6.	Are containers holding ignitable or reactive waste located at least 50 ft. from the facility's property line?	Yes	No
9.8.G.1.	7.	Are incompatible wastes placed in separate containers? (See APPENDIX 9.4 for examples of incompatible waste).	! Yes	No

9.8.G.3. 8.	Are storage containers holding hazardous wastes which are incompatible with nearby materials stored in containers, tanks, piles, or surface impoundments separated by dikes, berms, walls, or other devices?	
9.	Comments:	
	79 DRUMS IN STORAGE AREA ON 12/8/87 79 x 425 = 33,575 lbs	
	Campany HAS INTERIN STATUS TO STORE 91 DRUMS MAXI	ידו מחיי
	/	
Inspector's Name:	William SARNEDLY	
Title:	William SARNEDRY CHOMICAL ENGINEER	
Agency: Department of W		
Office Location: 101 N. Richmo	Fourteenth St., 11th Floor Monroe Building	
Date of Inspection:	12-8-87	
	-	
Inspector's Name:		
Title:		
Agency: Department of W	aste Management	
Office Location: 101 N. Richmo	Fourteenth St., 11th Floor Monroe Building nd, Virginia 23219	
Date of Inspection:		

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **REGION III**

841 Chestnut Building Philadelphia, Pennsylvania 19107

SUBJECT: RCRA Inspection - Relief International Richard W DATE: 10/16/86

VAD089028377

FROM:

Traci I. Self, Environmental Engineer

DELMARVA, DC, WV RCRA Enforcement Section (3HW15)

TO:

FILE

THRU:

John A. Armstead, Chief

DELMARVA, DC, WV RCRA Enforcement Section (3HW15)

THE STATE IS TAKING ACTION TO RESOLVE THE VIOLATIONS IN THIS

INSPECTION REPORT.

WE WILL MONITOR THE STATE ACTIVITY REGARDING RESOLUTION OF THESE VIOLATIONS.

Class II - CUPC - No schodule for closere ClassII - EUPC - elecomplete Training Recals



COMMONWEALTH of VIRGINIA

DEPARTMENT OF WASTE MANAGEMENT 11th Floor, Monroe Building 101 N. 14th Street Richmond, Va. 23219

Larry E. Lewis
Rehrig International
901 North Lombardy Street
Richmond, VA 23220

OCT 0 8 1986

CERTIFIED-RETURN RECEIPT REQUESTED

Dear Mr. Lewis:

On September 24, 1986 your facility was reinspected in accordance with the Virginia Hazardous Waste Management Regulations (VHWMR). During this visit it was noted that the facility had made significant improvements in complying with hazardous waste requirements; however, there are still a few areas that are not in total compliance with the Regulations. These deficiencies are indicated on the enclosed checklists.

Please take the appropriate corrective action for bringing your facility in total compliance with the regulations by November 10, 1986.

Thank you for your cooperation during this visit. If you have any questions regarding this matter please call me at (804) 225-2667.

Sincerely,

Renee C. Tyson, Chemist

Bureau of Hazardous Waste Management

Enclosure

Name	of Facility: Rahring Internation	onal	
	ess: 90 North Lambardy	Street	
	Richmond, Virginia 2	3220	up made + -
	Generator ID Number: VAD08902	8377	
Faci	lity Inspection Representative:	ul Bouz	
Title			
Telep	phone Number: (804) 355-78/0H		4
1. 1	There is hard		
r. r	what is business activity of firm? recycling, etc.) Manufoctula	(i.e., furniture mfg., m	etal plating,
		11 9	
	/ _		
3. L	ist the amounts of hazardous waste go	enerated, recycled and a $\left(\frac{1}{2}\right)$	ccumula ted.
3. L	ist the amounts of hazardous waste go		. / / /
	Characteristic - Ignitable (D001) Gorrosive (D002) Reactive (D003) EP Toxic (D004-		Sulated fino (5) or (3) ino (5) (4) (5) (5) (6) (7)
a .	Characteristic - Ignitable (D001) Corrosive (D002) Reactive (D003) EP Toxic (D004- D017)		Sulated fino (5) or (3) ino (5) (4) (5) (5) (6) (7)
a.	Characteristic - Ignitable (D001) Corrosive (D002) Reactive (D003) EP Toxic (D004- D017) Listed (F, K, or U list) Foot		Sulated fino (5) or (3) ino (5) (4) (5) (5) (6) (7)
a .	Characteristic - Ignitable (D001) Corrosive (D002) Reactive (D003) EP Toxic (D004- D017)		Sulated fino (5) or (3) ino (5) (4) (5) (5) (6) (7)

4.	Based on the above information, the comp	pany is classified as:
	a. Small quantity generator exempt	from regulations. (Form C)
	b. Recycler not exempt from regulation	s. (Form A)
	Generator. (Form A)	
5.	If facility treats, stores or disposes exempt under § 9.).	s on-site complete Form B (unless
6.	Complete the apporpriate checklists.	
	Container (Form I) Surface Impoundment (Form K)	Tank (Form J) Incineration & Thermal
	Landfill (Form N)	Treatment (Form O & P) Physical, Chemical & Biological Treatment (Form Q)
7.	Comments:	
Insp	pector's Name: <u>RENFE</u> (-	Tuson
Titl	le: Chemist	
Agen	ncy: Department of Waste Management	
Offi	ce Location: 101 N. Fourteenth St., 11th Richmond, Virginia 23219	Floor Monroe Building
Da te	of Inspection: $9/24/86$	

Title:	
Agency: Departm	ent of Waste Management
Office Location	Richmond, Virginia 23219

CHECKLIST FOR RCRA INSPECTION OF GENERATORS

Name of Facility:	Ret	orig International		
Address: <u>901</u>	North	Lambardy Street		
Richm	nond	Virginia 23220		
	_	VAD089028377		
Facility Inspection	on Repres	sentative: Bul Bouz		
Title: Phine	a Mac	12025		
Telephone Number:	(304)	355-7864	ż	
VA HWM Regs. Reference:				
6.3	ger	a manifest system currently used by the nerator so that off-site shipment of ardous wastes can be tracked?	Yes	No
		the following included on the generators ifest?		
5.3.B.1.	a)	The generator's name, address, telephone number and EPA ID number.	(Yes)	No
5.3.B.2.	b)	A unique five digit number assigned to this manifest by the generator.	(19)	No
5.3.B.3.	c)	Total number of pages used to complete the manifest.	Yes	No
5.3.B.4.	d)	The company name and EPA identification of each transporter.	Yes	No
5.3.B.5.	. е)	The company name, site address and the EPA ID number of the facility designated to receive the waste listed on the manifest.	Yes	No
5.3.B.6.	f)	The U.S. DOT description of each waste to include its proper shipping name, hazard class, and ID number (UN/NA), as identified in the Virginia Regulations		
		Governing the Transporation of Hazardous Materials.	(Yes)	No

	•	
5.3.B.7.	g) The units of weight or volume and the type and number of containers loaded in the transport vehicle included on the manifest form?	Yes No
5.3.B.8.	h) In case of international shipment, the point of departure (city & state) for those shipments destined for treatment, storage, and disposal outside the jurisdication of the United States.	No
5.3.C.	 The following certification noted on the generator's manifest form and is the certification acknowledged by the generator's signature. 	· č
	"I hereby declare that the content of this consignment are fully and accurately discribed above by proper shipping name and are classified packed, marked, and labled, and condition for transport by [mode of transportion] according to applicable international	型 can 海神の開発 マール さん
	and national governmental regulations."	Yes No
6.5.C.2. 3.	Have manifest been received from TSD for waste shipped over 45 days ago.	Yes No
	if not,	
	has the generator filed an exception report?	Yes No
5.5.A.7. 4.	Did the generator determine that the transporter has a Virginia transporter permit?	Yes No
6.4.E.1. 5.	Is hazardous waste being accumulated on-site by the generator for less than 90 days? If yes, N/A (Interim Salus for shroot in communers)	Yes No
6.4.E.1.a.	a) Is the waste placed in either <u>containers</u> or tanks? (If yes, fill out appropriate checklist. If no, TSD permit is required.)	Yes No
6.4.E.1.b.	b) Is the date accumulation of waste began clearly and visibly marked on each container and, does it indicate accumulation for less than 90 days?	Yes No

Form "A"

6.4.E.l.c.		c) During accumulation, are the storage containers and/or tank clearly labeled with the words Hazardous Waste? N/A	Yes	No
9.1.G.1.	6.	Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures?	(Yes)	No
9.1.G.2.	7.	Have new employees to the facility successfully completed training mentioned above within 6 months of their employment or assignment to the facility? This should be counted in your facility.	ntales.	No
9.1.G.3.	8.	Do personnel participate in an annual review of their initial training?	Yes	No
9.1.G.4.a.	9.	Does the facility maintain a record of:		
		(a) job titles for personnel that are involved with hazardous waste management; and Policy Manager not included	Yes (No /
		(b) the name of the employee filling each job? Ploting Manager not included	Yes	No
9.1.G.4.b.	10.	Does the facility have on record a written position description for each job title noted in Question #9? Porny Mongo no necessity	Yes	No 🗸
9.1.G.4.c.	11.	Does the facility maintain a written description of the type and amount of introductory and continuing training for those employees involved in hazardous waste management? Paragraphic moduled,	Yes	No
9.1.G.4.d.	12.	Does the facility have records to document this training? Plant develope a training withink, no records for parting manager.	Yes	№ √
9.2.B. 9.2.D.	13.	At the facility, is the following equipment installed:		
9.2.B.1.		a) An internal communications or alarm system capable of providing immediate emergency instructions to facility personnel if the hazardous waste storage area is threatened by fire or explosion?	Yes	No

9.2.B.2.		b) A device at the scene of hazardous waste generator operations capable of summoning emergency assistance from Police, Fire departments, etc.?	Yes	No
9.2.B.(3, 4)		c) Portable fire extinguishers, fire control, spill control, and decontamination equipment and water at adequate volume and pressure to supply expected fire demands, foam producing equipment, automatic sprinklers or water spray system?	Yes	No
9.2.C.	14.	Is a record of tests and inspections of required equipment (question 11) maintained at the facility?	Yes	No
9.2.F.	15.	Does the facility have adequate aisle space to allow the unobstructed movement of personnel and equipment during emergencies?	Yes	No
9.3.A.1. 6.4.E.1.d.	16.	Does the facility have an established contingency plan to deal with any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to the air, soil, groundwater or surface water?	Yes	No
9.3.	17.	Does the contingency plan contain the following elements:		
9.3.B.(1, 2)		a) A detailed description of emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, and water?	Yes	No
9.3.B.4.		b) A listing of names, addresses, and phone numbers of the generator facility emergency response coordinators? List primary coordinator. Name Bul Bull	Yes	No
		Title Maria Marian Telephone 355-7864		

9.3.B.5.	c)	A list of appropriate emergency equipment necessary to cope with emergencies at the generator facility?	Yes	No
9.3.B.5.	d)	Does this list specify the location and physical description of each item on the list and a brief description of each item on the list, and a brief outline of its capabilities.	Yes	No v
9.3.B.6.	e)	An evacuation plan for the generator facility where there is a possibility that evacuation could be necessary?	Yes	No
9.3.C.	f)	Have copies of the contingency plan been sent to all local police departments, fire departments, hospitals and Commonwealth and local emergency response teams? List:	<u>res</u>	No
		Richmond Are Dept		
9.3.B.		1) Is there documentation to indicate the personnel listed above received the contingency plan?	<u>Tes</u>	No
9.3.F.(9,_10)	g)	If the contingency plan has been implemented, was a written report filed with the Commissioner and were the Commissioner and other required authorities properly notified before operations resumed?	Yes	No ·
6.5.A.	mai	es the facility retain copies of all nifests, annual reports, and test results at least three years? Facility has developed a common waste note book to Keep all paper work	Yes	No
6.5.B.	19. Has	s the facility submitted an annual report the preceding calendar year?	Tes	No

20.	Comments
Inspector's Name:	RENEÉ C. Tyson Chams
Title:	Chames
	th Department, Bureau of Hazardous Waste Management
Office Location: 101 N.	Fourteenth St., 11th Floor Monroe Building
Richmo	9/24/80
Inspector's Name:	
Title:	
Agency: Va. State Healt	th Department, Bureau of Hazardous Waste Management
Office Location: 101 N. Richmo	Fourteenth St., 11th Floor Monroe Building ond, Virginia 23219
Date of Inspection:	

CHECKLIST FOR RCRA INSPECTION OF TREATMENT, STORAGE & DISPOSAL (TSD) FACILITIES

Name of Facility: Address: EPA ID Number: Facility Inspection Representative: Telephone: (VA HWM Regs. The facility: treats, stores, disposes Reference (Circle as appropriate) Does the facility receive hazardous waste 9.1.C.1. (No) Yes from a foreign source? If yes, has the facility notified the No Executive Director of the date of arrival? Yes Does the facility have a detailed chemical 9.1.D.(1, 2, 3) and physical analysis of a representative No (Yes) sample of the waste? 4. Does the facility have a waste analysis plan 9.1.D.5. No which specifies the following: the parameters for each hazardous waste; No a) (Yes) No b) test methods for each parameter; c) the sampling method used to obtain a (Yes) No representative sample; No frequency to review initial analysis. (Yes 5. If the facility receives wastes generated 9.1.D.6. off-site, does the plan specifiy procedures and sampling methods to ensure that the waste matches the identity of the waste designated on the accompanying manifest or Yes No shipping paper? N/A 6. Will physical contact or disturbance of the 9.1.E.1. waste injure unknowing persons or livestock? No (Yes)If yes, does the TSD facility have:

9.1.E.2.a.	a)	a 24-hour surveillance system which monitors and controls entry to the active portion of the facility?	Yes	No
9.1.E.2.a.(1)	b)	an artificial or natural boundary which surrounds active portions of the facility? and,	Yes	No
9.1.E.2.a.(2)	c)	a means to control entry at all times? (i.e., gates, attendants, locked entrances, etc.)	Tes	No
9.1.E.3.	đ	a restricted access sign posted at each entrance to the active portion of the facility?	Yes	No
	,	Is sign legible from a distance of 25 feet?	Yes	Ño
		Is sign in English and any other foreign language predominant to the geographical area?	Yes	No ÷
9.1.F.2.a.	s n r	oes the TSD facility have a written chedule for inspecting all equipment ecessary for prevention, detection or esponse to environmental or human health azards?	(es)	No No
9.1.F.2.c.) Does the schedule identify the types of problems which are to be looked for during the inspection?	Yes	No
9.1.F.2.d.	ъ) Does the schedule include frequency of these inspections?	Yes	No
9.1.G.1.	0	ave the facility personnel successfully ompleted a program of classroom training or n-the-job training in hazardous waste anagement procedures?	(Yes)	No
9.1.G.2.	8 a a	ave new employees to the facility ucessfully completed training mentioned bove within 6 months of their employment or ssignment to the facility? This should be document to the facility? This should be document to the facility?	Mes	No
9.1.G.3.	10. D	o personnel participate in an annual review f their intitial training?	Yes	No
9.1.G.4.a.	j W	oes the facility maintain a record of (a) ob titles for personnel that are involved ith hazardous waste management and (b) the ame of the employee filling each job? Thing Manager hot included	Yes	No 🗸

9.1.G.4.b.	12.	Does the facility have on record a written position description for each job title noted in Question #11? Planna Manager not included	Yes	Nov
9.1.G.4.c.	13.	Does the facility maintain a written description of the type and amount of introductory and continuing training for those employees, involved in hazardous waste management? Paring manager hot included	Yes	No V
9.1.G.4.d.	14.	Does the facility have records to document this training? flease arrage a training outline, no records for plating Manager,	Yes	No ~
9.2.B. 9.2.D.	15.	At the facility, is the following equipment installed:		
9.2.B.1.		a) An internal communications or alarm system capable of providing immediate emergency instructions to facility personnel if the hazardous waste storage area is threatened by fire or explosion?	(Yes)	- No
9.2.B.2.		b) A device at the scene of hazardous waste operations capable of summoning emergency assistance from Police, Fire departments, etc.?	Yes	No
9.2.B.(3, 4)		c) Portable fire extinguishers, fire control, spill control, and decontamination equipment and water at adequate volume and pressure to supply expected fire demands, foam producing equipment, automatic sprinklers or water spray system?	Yes	, No
9.2.C.	16.	Is a record of tests and inspections of required equipment (question 15) maintained at the facility?	Yes	No
9.2.E.	17.	Does the facility have adequate aisle space to allow the unobstructed movement of personnel and equipment during emergencies?	Yes	₎ No
9.3.A.1.	18.	Does the facility have an established contingency plan to deal with any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to the air, soil, groundwater or surface water that may impact hazardous waste currently in storage at the facility?	Yes) No
9.3.	19.	Does the contingency plan contain the following elements:	•	

9.3.B.(1, 2)	a)	A detailed description of emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, and water?	Yes	No
9.3.B.3.	b)	A detailed description of arrangements formally agreed to by local police, fire departments, and state and local emergency teams to provide assistance during emergency situations?	Yes	No
9.3.B.4. 9.3.E.	c)	A listing of names, addresses, and phone numbers of the generator facility emergency response coordinators? List primary coordinator.	Yes	No -
		Name Bulbour Title Playing Manager Telephone 365-1864		
9.3.B.5.	d)	A list of all required emergency equipment necessary to cope with emergencies at the generator facility?	(Yes)	No
9.3.B.5.	e)	Does this list specify the location and of each item on the list, and a brief description of each item on the list, and a brief outline of its capabilities?	Yes	No) 🗸
9.3.C.	f)	Have copies of the contingency plan been sent to all local police departments, fire departments, hospitals and Commonwealth and local emergency response teams? List:	(Yes)	No
n H		Richmond Fire Sept.		
9.3.B.		1) Is there documentation to indicate the personnel listed above received the contingency plan?	(es	No

9.3.F.(9, 10)		g) If the contingency plan has been implemented, was a written report filed with the Executive Director and were the Executive Director and other required authorities properly notified before operations resumed?	Yes	No
9.3.D.	20.	Have any amendments of the contingency plan been necessary? If yes, explain in comment section.	Yes	No
9.4.B.2.e. 5.4.E.1.	21.	Does the facility retain copies of all manifests, and inspection results for at least three years?	(es)	No
	22.	Does the TSD facility receive hazardous waste from off-site generators?	Yes	No
9.4.A.		If yes, has the TSD determined:		
5.5.C.2.a.		a) That manifests are completed, signed, and dated by the generator and each transporter for all shipments received	Yes	No
5.5.C.2.b.		b) That the manifest copies are signed and dated	Yes	No
5.5.C.2.d.		c) A copy has been given to the transporter	Yes	No
5.5.C.2.e.		d) A copy has been sent to the generator	Yes	No
5.5.C.2.f.		e) A copy has been retained and filed at the TSD facility.	Yes	No
9.4.B.	23.	Does the TSD facility have a written operating record which contains the following information: N/A		
		For facility receiving off-site hazardous waste: N/A		
9.4.B.2.a.		a) A description of and the quantity of each hazardous waste received, and the method and date of treatment, storage or disposal? (Use Appendix 9.1)	Yes	No
		Storage,		
		Treatment,,		
		Disposal,,		

	1	For	facilities disposing of hazardous waste:		
9.4.B.2.b.	1	b)	The location of each hazardous waste within the facility and the quantity at each location recorded on a map or diagram of each cell or disposal area?	Yes	No
]	For	all TSD facilities:		
9.4.B.2.c.	C	c)	Detailed records and results of waste analyses and incineration trial tests performed on wastes coming into the facility?	Yes	No
9.4.B.2.d.	Ć	d)	Detailed operating summary reports and description of all emergency incidents that required the implementation of the facility contingency plan?	(ES)	No
9.4.B.2.e. 9.1.F.4.	€	e)	Detailed records and results of inspections performed on facility emergency equipment, TSD systems, and hazardous waste areas?	Yes	No :
9.4.B.2.f.	i	f)	Detailed monitoring, testing, and analytical data where required?	(es)	No
9.4.B.2.g.	٤	g)	All closure cost estimates, and for disposal facilities all post-closure cost estimates?	Yes	No
			Closure Cost Estimate \$ 9,900		
9.6.			s the facility have a written closure which includes:		
9.6.C.1.b.	8	a)	An estimate of the maximum waste inventory in storage or treatment at any time during life of facility?	Yes	No
9.6.C.1.c.	ì	ь)	A description of steps that will be used to decontaminate facility equipment?	(Yes)	No
9.6.C.1.d.	C	c)	An estimate of the expected year for closure?	Yes	No
9.6.C.1.d.	d	d)	A schedule for final closure?	Yes	No
	•	e)	A copy of the closure plan given to the inspector?	Yes	No
9.7.C.	a	assı	all TSD facilities, has financial urance for closure for this facility been ablished?	Yes	No

		Instrument(s) used:		
		Trust Fund Letter of Credit Performance Bond Financial Test Financial Guarantee Bond Certificate of Insurance Corporate Guarantee		
	26.	Has a copy of all related documents been forwarded to the Virginia State Department of Health?	Yes	No
		* Submittal Date		
		If no, was a copy of these documents provided to the inspector?	Yes	No
		If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	No
		Date by which a copy of these documents is to be mailed.		7 7 7 7 7
9.7.G.	27.	Has liability coverage for sudden accidential occurrences** been established for this facility?	Ýes)	No
		Instrument(s) used: Certificate of Insurance Financial Test Liability Endorsement		
	28.	Has a copy of all related documents been forwarded to the Virginia State Department of Health?	Yes	No
		* Submittal Date		

^{*} If the finanical test was used, all three (3) initially submitted items specified in § 9.7.C.5. must be updated within 90 days after the close of each succeeding fiscal year.

^{**} Sudden accidental occurrences: at least \$1 million per occurrence and \$2 million annual aggregate.

Non-sudden accidental occurrences: at least \$3 million per occurrence and \$6 million annual aggregate.

		Č –		
			Form '	'В"
		If no, was a copy of these documents provided to the inspector?	Yes	140
		If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	No
		Date by which a copy of these documents is to be mailed.		
9.6.н.	29.	For landfills, surface impoundments, waste piles and land treatment facilities, does the facilities have a written post-closure plan that includes:		
9.6.H.l.a.		a) Groundwater monitoring activities?	Yes	No
9.6.H.1.b.		b) Maintenance activities to ensure containment?	Yes	No
9.6.H.1.c.		c) Name, address, and phone number of contact during post-closure period?	Yes	No
		d) Post-closure cost estimate?	Yes	No
		d) Post-closure cost estimate? Amount \$	Yes	No
9.7.E.	30.	Amount \$	Y es Yes	
9.7.E.	30.	Amount \$ For landfills, surface impoundments, waste piles and land treatment facilities, has financial assurance for post-closure care		
9.7.E.	30.	Amount \$ For landfills, surface impoundments, waste piles and land treatment facilities, has financial assurance for post-closure care has been estimated? N/A		
9.7.E.	30.	Amount \$ For landfills, surface impoundments, waste piles and land treatment facilities, has financial assurance for post-closure care has been estimated? NA Instrument(s) used:		

^{*} If the finanical test was used, all three (3) initially submitted items specified in § 9.7.C.5. must be updated within 90 days after the close of each succeeding fiscal year.

Form "B"

			Form	B
		If no, was a copy of these documents provided to the inspector?	Yes	No
		If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	No
		Date by which a copy of these documents is to be mailed.		
9.7.G.2.	32.	For landfills, surface impoundments and land treatment facilities has liability coverage** for nonsudden accidental occurrences been established?	Yes	No
		<pre>Instrument(s) used:</pre>		
		Certificate of Insurance Financial Test Liability Endorsement		-
	33.	Has a copy of all related documents been forwarded to the Virginia State Department of Health?	Yes	No
		* Submittal Date		
		If no, was a copy of these documents provided to the inspector?	Yes	No
		If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	No
		Date by which a copy of these documents is to be mailed.		
9.5.	34.	For landfills, surface impoundments, wastepiles (if closed as landfills) and land treatment facilities, has a groundwater/	V	No.
		monitoring program been implemented?	ies	No
9.4.D.	35.	Has an annual report been filed?	Tes	No

^{*} If the financial test was used, all three (3) initially submitted items specified in § 9.7.C.5. must be updated within 90 days after the close of each succeeding fiscal year.

^{**} Sudden accidental occurrences: at least \$1 million per occurrence and \$2 million annual aggregate.

Non-sudden accidental occurrences: at least \$3 million per occurrence and \$6 million annual aggregate.

36	. Comments:
•	
Inspector's Name:	RENEE C. Tyson Chemist
Title:	Chemist
Agency: Department o	
Office Location: 101	N. Fourteenth St., 11th Floor Monroe Building
	hmond, Virginia 23219
Date of Inspection:	9/24/86
- L. V	$\boldsymbol{\cdot}$
Inspector's Name:	
Title:	
Agency: Department of	f Waste Management
Office Location: 101 Ric	N. Fourteenth St., 11th Floor Monroe Building
Date of Inspection:_	

CHECKLIST FOR RCRA INSPECTION OF USE AND MANAGEMENT OF CONTAINERS

Name of Faci	lity: Ken	rig International	
Address: 9	of North	Lambard Street	
_	chmond 1	Virginia 23220	
EPA Generato	ID Number:	YAD089028377	
		sentative: Bul Buz	
Title: 764			
Telephone Num	, ,	355-7864	
	CC TOCTTTTTE	n this checklist apply to owners and operato s and generators accumulating less than 90 ntainers of hazardous waste, except as § 9.	• •
VA HWM Regs. Reference			
9.8.B.	not	e all containers in good condition, i.e., showing signs of leakage or corrosion or other deterioration/deformation?	es No
9.8.C.	com; them	containers lined or made of materials apatible with hazardous wastes placed into m so that the container will not react or rode with the hazardous wastes?	Ves No
9.8.D.1.	3. Are kept	all containers holding hazardous waste t closed during storage?	Yes No
9.8.E.	are	areas where hazardous waste containers stored inspected by the owner/operator least once a week?	Yes No
9.1.F.2.a. 9.1.F.4.	5. In a ques	an inspection log maintained? (See stion #7 of TSD checklist.)	Yes No
9.8.F.	wast	containers holding ignitable or reactive te located at least 50 ft. from the lity's property line?	Yes No
9.8.G.1.	conta	incompatible wastes placed in separate ainers? (See APPENDIX 9.4 for examples ncompatible waste).	les No

			Form	" I"
9.8.G.3.	8.	Are storage containers holding hazardous wastes which are incompatible with nearby materials stored in containers, tanks, piles, or surface impoundments separated by dikes, berms, walls, or other devices?	Yes	No
	9.	Comments:		
		·		
			-	
Inspector's Name	:	RENEE C. Tyson		
Title:		Chemist	¥	
Agency: Departme	nt of W	Jaste Management		i i
Office Location:	101 N. Richmo	Fourteenth St., 11th Floor Monroe Building and, Virginia 23219		
Date of Inspecti		9/26/86		
Inspector's Name	• <u> </u>			
Title:				
Agency: Departmen				
	101 N.	Fourteenth St., 11th Floor Monroe Building		
Date of Inspection				
				

JULY 26, 1986

LETTER FROM COMMONWELTH OF VIRGINIA DEPARTMENT OF HEALTH TO REHRIG INTERNATIONAL



COMMONWEALTH of VIRGINIA

Department of Health Richmond, Va. 23219

JAMES B. KENLEY, M.D. COMMISSIONER

Certified Mail Return Receipt Requested Virginia: The State Board of Health

Re: Rehrig International, Inc. VAD089028377

Compliance Order

SECTION A: Findings

- 1. Rehrig International, Inc. (herein after called the corporation) is the owner and operator of a business in Richmond, Virginia for which a "Notification of Hazardous Waste Activity" was filed with the U.S. Environmental Protection Agency (EPA) on November 4, 1980 declaring that Rehrig International, Inc. is a generator and storer of hazardous waste listed or identified under Title 40, Code of Federal Regulations (CFR), Part 261.
- 2. Rehrig International, Inc. filed "Part A" of an application for a permit to treat, store, or dispose of hazardous waste on November 11, 1980, with the U.S. Environmental Protection Agency. In the application, the corporation proposed to store a maximum of 5,000 gallons of hazardous waste in drums.
- 3. The Bureau of Hazardous Waste Management sent the corporation a letter dated July 23, 1984, which stated the requirements for liability coverage for owners/operators of hazardous waste management facilities. An audit of Bureau files in November, 1984 indicated that Rehrig has not complied with financial requirements for hazardous waste management facilities in accordance with Section 9.08 of the Virginia Hazardous Waste Management Regulations (VHWMR).
- 4. The Virginia Department of Health, through the formal authorization published on November 3, 1981 in the Federal Register has been given the authority to implement its own regulations in lieu of the sections of 40 CFR promulgated under the Resource Conservation and Recovery Act. Additionally, based on the pertinent sections of Title 32.1, Code of Virginia (1950), as amended, the Department has general responsibility for administration of Virginia statutes and regulations related to hazardous waste management.



SECTION B:

- 1. In accordance with Section 3006(c) of the Resource Conservation and Recovery Act, the Commonwealth of Virginia has been granted interim authorization for Phase I and Phase II Components A, B, and C to operate its hazardous waste program in lieu of the Federal hazardous waste program as published in the Federal Register on November 3, 1981, August 17, 1983, and December 18, 1984 respectively.
- 2. The State Board of Health is assigned responsibility for general supervision and control of hazardous waste management activities under Section 32.1-178 of the Code of Virginia (1950), as amended. This responsibility specifically includes the promulgation of regulations. Section 32.1-180 of the Code requires that no person treat, store, dispose or transport hazardous waste without a permit from the Commissioner.
- 3. The State Board of Health has promulgated regulations controlling the generation and management of hazardous wastes entitled, "Commonwealth of Virginia, State Board of Health, Hazardous Waste Management Regulations". These regulations became effective May 21, 1981 with subsequent amendments effective October 1, 1981, December 1, 1982, July 1, 1983, November 1, 1983, September 20, 1984, and October 1, 1984.
- 4. Section 1.04.03 of the Virginia Hazardous Waste Management Regulations (VHWMR) requires all persons who generate, transport, treat, store, or dispose of hazardous waste to comply with the provisions of these regulations.
- 5. Sections 32.1-26 and 32.1-27 of the Code of Virginia (1950), as amended, authorize the Board of Health to issue orders directing compliance with any provision of law or regulation of the Board. Orders of the Board are enforceable pursuant to Sections 32.1-27 and 32.1-186 of the Code.
- 6. The State Health Commissioner is the chief executive officer of the Virginia Department of Health and the principal agent of the State Board of Health. The Commissioner is empowered to act with the authority of the Board when it is not in session.

SECTION C: Order

1. The corporation shall comply with the Virginia Hazardous Waste Management Regulations (VHWMR).

- 2. By March 4, 1985, the corporation shall deliver to the Bureau of Hazardous Waste Management documentation of compliance with financial requirements for sudden liability and closure cost in accordance with Section 9.08 of the VHWMR.
- 3. By March 1, 1985, the corporation shall deliver to the Bureau of Hazardous Waste Management an annual report for calendar year 1984 in accordance with Section 9.05.04 of the VHWMR.

SECTION D: Stipulations

- 1. For the purposes of this proceeding, the corporation admits the jurisdictional and factual allegations contained herein.
- 2. For the purposes of this proceeding, the corporation waives the right to request further hearing on any issue of fact or law herein.
- 3. The corporation declares that fair and due process under the Administrative Process Act, Title 9, Chapter 1.1:1, Sections 9-6.14 has been received.

This is an Order of the State Board of Health and the State Health Commissioner in accordance with Title 32.1, Code of Virginia (1950), as amended.

Yames B. Kemley, M.D. State Health Commissioner The foregoing instrument was acknowledged before me this 26 day of December, 1984, by James B. Kenley.

My commission expires:

July 26, 1986

Motory Public Dongo

Seen and Agreed to:

Larry E. Lewis, Controller Rehrig International, Inc. 901 North Lombardy Street Richmond, Virginia 23220

SLM2:1697/smm

JULY 30, 1986 RCRA INSPECTION



COMMONWEALTH of VIRGINIA

DEPARTMENT OF WASTE MANAGEMENT 11th Floor, Monroe Building 101 N. 14th Street Richmond, Va. 23219

JUL 3 0 1986

CERTIFIED - RETURN RECEIPT REQUESTED

Mr. Larry E. Lewis Rehrig International 901 North Lombardy Street Richmond, VA 23229

Dear Mr. Lewis:

On June 25, 1986 your facility was reinspected in accordance with the Virginia Hazardous Waste Management Regulations (VHWMR). During this visit it was noted that again your facility was not in compliance with the regulations. These deficiencies are indicated by the red markings on the enclosed inspection checklists.

According to your records, these violations were brought to your attention in letters dated April 23, 1985 and January 17, 1986 as a result of inspections conducted on March 22, 1985 and December 19, 1985. To again clarify those areas of non-compliance I have listed your deficiencies below. You need to:

- 1. Acquire a current detailed chemical and physical analysis of a representative sample of your hazardous waste.
- 2. Establish a written waste analysis <u>plan</u> which specifies the following:
 - a. the parameter for each hazardous waste,
 - b. test methods for each parameter,
 - c. the sampling method used to obtain a representative sample,
 - d. frequency to review analysis.
- Maintain a written inspection schedule for inspecting all equipment necessary for prevention, detection or response to environmental or human health hazards, identifying the types of problems which are to be looked for during the inspection.
- 4. Establish an outline or written description of the training program offered to new employees involved with hazardous waste management at the facility.

Mr. Larry E. Lewis Page 2

- 5. State and document in the written training description that all new employees will successfully complete the training mentioned above within 6-months of employment.
- 6. Maintain a record of names, job titles and job description of all personnel involved with hazardous waste management. Document dates for annual reviews as well as initial and continuing training.
- 7. Establish a hazardous waste contingency plan that addresses spills. The plan should include detailed description of emergency procedures facility personnel will implement in case of spill or any other unplanned release.
- 8. Describe arrangements formally agreed to by local authorities who will provide assistance during an emergency situation.
- 9. Emergency equipment lists should include the locations of all equipment.
- 10. Send copies of the contingency plan to local police, fire departments and hospitals who will provide assistance during an emergency. Document that the agencies listed above received the plan.
- 11. Retain copies of all manifest, test results inspection results and annual reports for at least three years.
- 12. Establish a closure cost estimate consistent with the information and maximum quantities listed in your Part A application and closure plan. The alternative is to amend your Part A application and closure plan to be consistent with figures used in establishing your closure cost estimate. These three documents (Part A application, closure plan, and closure cost estimate) must use the same quantity for maximum amount of hazardous waste in storage at any time.
- 13. Include description of steps that will be used to decontaminate the facility equipment and a schedule for final closure in facility closure plan.

Please take the appropriate corrective action for bringing your facility into total compliance by September 2, 1986. A reinspection will follow shortly after this date.

If you have any questions regarding this matter, please call me at (804) 225-2667.

Sincerely,

Reneé Cheryl Tyson, Chemist

Bureau of Hazardous Waste Management

SURVEY SHEET

Name of Facility: Rehrio Interna	ational
Address: 901 North Lombardy	Street
- Richmond, Virginia 2	3227
- Morning of	377
Er A Genera de l'	1 821.7
Facility Inspection Representative: Rou	1 DUL
Title: Plating Manager	
Telephone Number: (804) 355 - 7864	!
	i.e., furniture mfg., metal plating, shapping warts
2. Give brief description of waste stream Nickel-chrome plating sludge.	(s) and code designation(s). (FON)(T)
3. List the amounts of hazardous waste ge	nerated, recycled and accumulated.
3. List the amounts of hazardous waste ge	nerated, recycled and accumulated.
3. List the amounts of hazardous waste ge	(1) (2) (3) (4) (5)
3. List the amounts of hazardous waste ge	$ \begin{array}{c ccccc} & & & & & & & & & & & & & & & & & & &$
3. List the amounts of hazardous waste ge	$ \begin{array}{c ccccc} & & & & & & & & & & & & & & & & & & &$
3. List the amounts of hazardous waste ge	$ \begin{array}{c ccccc} & & & & & & & & & & & & & & & & & & &$
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
a. Characteristic - Ignitable (D001)	$ \begin{array}{c ccccc} & & & & & & & & & & & & & & & & & & &$
a. Characteristic - Ignitable (D001) Corrosive (D002)	$ \begin{array}{c ccccc} & & & & & & & & & & & & & & & & & & &$
a. Characteristic - Ignitable (D001) Corrosive (D002) Reactive (D003) EP Toxic (D004-	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
a. Characteristic - Ignitable (D001) Corrosive (D002) Reactive (D003) EP Toxic (D004- D017)	Total Cenerated #/mo (1) Total Recycled #/mo (2) Total Accumulated (1) Total Accumulated (2) Total Accumulated (2) Total
a. Characteristic - Ignitable (D001) Corrosive (D002) Reactive (D003) EP Toxic (D004-	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
a. Characteristic - Ignitable (D001) Corrosive (D002) Reactive (D003) EP Toxic (D004- D017)	Total Cenerated #/mo (1) Total Recycled #/mo (2) Total Accumulated (1) Total Accumulated (2) Total Accumulated (2) Total

4.	Based on the above information, the company is classified as:
	a. Small quantity generator exempt from regulations. (Form C)
	b. Recycler not exempt from regulations. (Form A)
	C. Generator. (Form A)
5.	If facility treats, stores or disposes on-site complete Form B (unless exempt under § 9.).
6.	Complete the apporpriate checklists.
	Container (Form I) Surface Impoundment (Form K) Tank (Form J) Incineration & Thermal Treatment (Form O & P)
	Landfill (Form N) Physical, Chemical & Biological Treatment (Form Q)
7.	Comments:
Ins	spector's Name: RENEE' C. Tyson
	le: U'U''5/
Age	ency: Va. State Health Department, Bureau of Hazardous Waste Management
Off	Fice Location: 101 N. Fourteenth St., 11th Floor Monroe Building Richmond, Virginia 23219
Dat	te of Inspection: 6/25/86

Survey

Inspecto	or's h	Name:	
Title:_			
Agency:	Va. S	State	Health Department, Bureau of Hazardous Waste Management
Office I	Locati	lon:]	01 N. Fourteenth St., 11th Floor Monroe Building ichmond, Virginia 23219
Date of	Inspe	- ection	1:

	TOT TOT DODA INCRECTION OF CENERATORS		
CHECKL	IST FOR RCRA INSPECTION OF GENERATORS		
Name of Facility:	KENTIG LATORATIONAL		
Address: 90/ /	Vorth Lombordy Street		**************************************
	nd, là. 23227		
EPA Generator ID Number	: VAD089028377		
Facility Inspection Rep	resentative: Paul Bauz		
Title: Plating /	Manager		
	304) 355- 7864		
VA HWM Regs. Reference:			
6.3	Is a manifest system currently used by the generator so that off-site shipment of hazardous wastes can be tracked?	Ýes	No
2.	Is the following included on the generators manifest?		
5.3.B.1.	a) The generator's name, address, telephone number and EPA ID number.	(es)	No
5.3.B.2.	b) A unique five digit number assigned to this manifest by the generator.	Yes	No
5.3.B.3.	c) Total number of pages used to complete the manifest.	Yes	No
5.3.B.4.	d) The company name and EPA identification of each transporter.	Yes	No
5.3.B.5.	e) The company name, site address and the EPA ID number of the facility designated to receive the waste listed on the manifest.	Yes	No
5.3.B.6.	f) The U.S. DOT description of each waste to include its proper shipping name, hazard class, and ID number (UN/NA), as identified in the Virginia Regulations Governing the Transporation of Hazardous	No.	No

Materials.

5.3.B.7.	g)	The units of weight or volume and the type and number of containers loaded in the transport vehicle included on the manifest form?	Yes	No
5.3.B.8.	h)	In case of international shipment, the point of departure (city & state) for those shipments destined for treatment, storage, and disposal outside the jurisdication of the United States.	Yes	No
5.3.C.	i)	The following certification noted on the generator's manifest form and is the certification acknowledged by the generator's signature.	·	-
	•	"I hereby declare that the content of this consignment are fully and accurately discribed above by proper shipping name and are classified packed, marked, and labled, and condition for transport by [mode of transportion] according to applicable international and national governmental regulations."	Yes	No
6.5.C.2.	3. Hav	re manifest been received from TSD for te shipped over 45 days ago.	Yes	No
	if	not,		
	has	the generator filed an exception report?	Yes	No
5.5.A.7.	tra	the generator determine that the ansporter has a Virginia transporter mit?	Yes	No
6.4.E.1.	by	hazardous waste being accumulated on-site the generator for less than 90 days? If , N/A Interim Holus for storage in confaines	Yes	No
6.4.E.1.a.	a)	Is the waste placed in either <u>containers</u> or tanks? (If yes, fill out appropriate checklist. If no, TSD permit is required.)	Yes	No
6.4.E.l.b.		Is the date accumulation of waste began clearly and visibly marked on each container and, does it indicate accumulation for less than 90 days?	Yes	No

		-3-	Form	"A"
6.4.E.l.c.		c) During accumulation, are the storage containers and/or tank clearly labeled with the words Hazardous Waste?	Yes	No
9.1.G.1.	6.	Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures?	Yes	No
9.1.G.2.	7.	Have new employees to the facility successfully completed training mentioned above within 6 months of their employment or assignment to the facility? This should be stoken your Haining suffine.	Yes	No
9.1.G.3.	8.	in the in an appund review	Yes	No
9.1.G.4.a.	9.	Does the facility maintain a record of:		
		(a) job titles for personnel that are involved with hazardous waste management; and Shill have not included all employees involved in haz wask room.	Yes	No
· ·		(b) the name of the employee filling each job?	Yes	NO
9.1.G.4.b.	10.	Does the facility have on record a written position description for each job title noted in Question #9?	Yes	
9.1.G.4.c.	11.	Does the facility maintain a written description of the type and amount of introductory and continuing training for those employees involved in hazardous waste management?	Yes	No
9.1.G.4.d.	12.	Does the facility have records to document this training?	Yes	Ne
9.2.B. 9.2.D.	13.	At the facility, is the following equipment installed:		
9.2.B.1.		a) An internal communications or alarm system capable of providing immediate emergency instructions to facility personnel if the hazardous waste storage area is threatened by fire or explosion?	Yes	No

		-4 -	Form "A"
9.2.B.2.		b) A device at the scene of hazardous waste generator operations capable of summoning emergency assistance from Police, Fire departments, etc.?	Yes No
9.2.B.(3, 4)		c) Portable fire extinguishers, fire control, spill control, and decontamination equipment and water at adequate volume and pressure to supply expected fire demands, foam producing equipment, automatic sprinklers or water spray system?	Yes No
9.2.C.	14.	Is a record of tests and inspections of required equipment (question 11) maintained at the facility?	Yes
9.2.F.	15.	Does the facility have adequate aisle space to allow the unobstructed movement of personnel and equipment during emergencies?	Yes No
9.3.A.1. 6.4.E.1.d.	16.	Does the facility have an established contingency plan to deal with any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to the air, soil, groundwater or surface water?	Yes No
9.3.	17.	Does the contingency plan contain the following elements:	
9.3.B.(1, 2)		a) A detailed description of emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous, wastes to air, soil, and water? All took of addressed spill procedures.	Yes No
9.3.B.4.		b) A listing of names, addresses, and phone numbers of the generator facility emergency response coordinators? List primary coordinator.	Yes No

Telephone _

	- >-	Form "A"
9.3.B.5.	c) A list of appropriate emergency equipment necessary to cope with emergencies at the generator facility?	Yes No
9.3.B.5.	d) Does this list specify the location and physical description of each item on the list and a brief description of each item on the list, and a brief outline of its capabilities.	1 -
·9.3.B.6.	e) An evacuation plan for the generator facility where there is a possibility that evacuation could be necessary?	Yes No
9.3.C.	f) Have copies of the contingency plan been sent to all local police departments fire departments, hospitals and Commonwealth and local emergency response teams? List:	, i
	Richmon Police "Fire	-
9.3.B.	April have not addressed the hispites who would respond in case of energy 1) Is there documentation to indicate the personnel listed above received the contingency plan?	exy •
9.3.F.(9, 10)	g) If the contingency plan has been implemented, was a written report file with the Commissioner and were the Commissioner and other requires authorities properly notified before operations resumed?	d e d
6.5.A.	18. Does the facility retain copies of all manifests, annual reports, and test result for at least three years? Could not that fest 1634/15 of samples falon from the low waster	Yes No
6.5.B.	19. Has the facility submitted an annual repor for the preceding calendar year?	t Yes No

20.	Comments
•	
Inspector's Name:	Chemist C. Tyson
Title:	Chemist
Agency: Va. State Heal	th Department, Bureau of Hazardous Waste Management
Office Location: 101 N	. Fourteenth St., 11th Floor Monroe Building ond, Virginia 23219
Date of Inspection:	6/25/86
Inspector's Name:	
Title:	
Agency: Va. State Heal	th Department, Bureau of Hazardous Waste Management
Office Location: 101 N	. Fourteenth St., 11th Floor Monroe Building ond, Virginia 23219
Date of Inspection:	

Form "B" (VA) 4/1/86

CHECKLIST FOR RCRA INSPECTION OF TREATMENT, STORAGE & DISPOSAL (TSD) FACILITIES

Name of Facility:	RE	chria International		
Address: 90/	Na	the proporty street		
Address. 701	omo	nd 6 23227		
	1	781, W. 23221		
EPA ID Number:	ADO	99028377		
Facility Inspecti	on Re	presentative: Paul Bauz		
Title: Platin	∞	Manager		
Telephone: (804	7 2	55-7864		
Telephone: (<u>701</u>	.' <u> </u>		•	-
VA HWM Regs.				
Reference	1.	The facility: treats, stores, disposes (Circle as appropriate)		,
9.1.C.1.	2.	Does the facility receive hazardous waste from a foreign source?	Yes	No
		If yes, has the facility notified the Commissioner of the date of arrival?	Yes	No
9.1.D.(1, 2, 3)	3.	Does the facility have a detailed chemical and physical analysis of a representative sample of the waste? Analysis soon of previous property were not appoint, and been mispaced.	Yes	No
9.1.D.5.	4.	Does the facility have a waste analysis plan which specifies the following:	Yes	No
		a) the parameters for each hazardous waste;	Yes	No
		b) test methods for each parameter;	Yes	No
· .		 c) the sampling method used to obtain a representative sample; 	Yes	NO
		d) frequency to review initial analysis.	Yes	No
9.1.D.6.	5.	If the facility receives wastes generated off-site, does the plan specifiy procedures and sampling methods to ensure that the waste matches the identity of the waste designated on the accompanying manifest or		
		shipping paper? N/A	Yes	No
9.1.E.1.	6.	Will physical contact or disturbance of the waste injure unknowing persons or livestock?	Yes	No
		If yes, does the TSD facility have:		

			rorm B	, ··
9.1.E.2.a.		a) a 24-hour surveillance system which monitors and controls entry to the active portion of the facility?	Yes	No
9.1.E.2.a.(1)		 an artificial or natural boundary which surrounds active portions of the facility? and, 	Yes	No
9.1.E.2.a.(2)		c) a means to control entry at all times? (i.e., gates, attendants, locked entrances, etc.)	Yes	No
9.1.E.3.		d) a restricted access sign posted at each entrance to the active portion of the facility?	Yes	Ño
		Is sign legible from a distance of 25 feet?	Yes	No
		Is sign in English and any other foreign language predominant to the geographical area?	Yes	No
9.1.F.2.a.	7.	Does the TSD facility have a written schedule for inspecting all equipment necessary for prevention, detection or response to environmental or human health hazards?	(les)	No
9.1.F.2.c.		a) Does the schedule identify the types of problems which are to be looked for during the inspection?	Yes	No
9.1.F.2.d.		b) Does the schedule include, frequency of these inspections?	Yes	No
9.1.G.1.	8.	Have the facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures?	Yes	No
9.1. G. 2.	9.	Have new employees to the facility successfully completed training mentioned above within 6 months of their employment or assignment to the facility? This should be stated and followed, in upon Holning autine.	Yes	No
9.1.G.3.	10.		Yes	Now
9.1.G.4.a.	11.	Does the facility maintain a record of (a) job titles for personnel that are involved with hazardous waste management and (b) the name of the employee filling each job? Still have not included all employees involved with hazardous waste mant.	Yes	10 Y

F	_	,-	m	**	R	**

9.1.G.4.b.	12.	Does the facility have on record a written position description for each job title noted in Question #11? See comment record!	Yes	No
9.1.G.4.c.	13.	Does the facility maintain a written description of the type and amount of introductory and continuing training for those employees involved in hazardous waste management?	Yes	No
9.1.G.4.d.	14.	Does the facility have records to document this training?	Yes	No
9.2.B. 9.2.D.	15.	At the facility, is the following equipment installed:		-
9.2.B.1.		a) An internal communications or alarm system capable of providing immediate emergency instructions to facility personnel if the hazardous waste storage area is threatened by fire or explosion?	Yes	
9.2.B.2.		b) A device at the scene of hazardous waste operations capable of summoning emergency assistance from Police, Fire departments, etc.?	Yes	No
9.2.B.(3, 4)		c) Portable fire extinguishers, fire control, spill control, and decontamination equipment and water at adequate volume and pressure to supply expected fire demands, foam producing equipment, automatic sprinklers or water spray system?	(No
9.2.C.	16.	Is a record of tests and inspections of required equipment (question 15) maintained at the facility?	(es)	No
9.2.E.	17.	Does the facility have adequate aisle space to allow the unobstructed movement of personnel and equipment during emergencies?	(es	No ·
9.3.A.1.	18.	Does the facility have an established contingency plan to deal with any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to the air, soil, groundwater or surface water that may impact hazardous waste currently in storage at the facility? I an does not address of the facility?	Yes	No V
9.3.	19.	Does the contingency plan contain the following elements:		

9.3.B.(1, 2)	a)	A detailed description of emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, and water? Hill have not confessed spill procedures.		No
9.3.B.3.	b)	A detailed description of arrangements formally agreed to by local police, fire departments, and state and local emergency teams to provide assistance during emergency situations?	Yes	No
9.3.B.4. 9.3.E.	c)	A listing of names, addresses, and phone numbers of the generator facility emergency response coordinators? List primary coordinator.	Yes	-) No
		Name Paul Bouz	·	
		Title Playing Manager		
		Telephone 355-7864		
9.3.B.5.	d)	A list of all required emergency equipment necessary to cope with emergencies at the generator facility?	Yes	No
9.3.B.5.	e)	Does this list specify the location and of each item on the list, and a brief description of each item on the list, and a brief outline of its capabilities?	Yes	No
9.3.C.	f)	sent to all local police departments, fire departments, hospitals and Commonwealth and local emergency	(Va)	Na
		Richmond Police # Fire	les	No
		" FIJE		
9.3.B.		Still have not address the hospital who would respond in was of amergency 1) Is there documentation to indicate the personnel listed above received	·	
		the contingency plan?	Yes	

.

		- 5 -	Form	"B"
9.3.F.(9, 10)		g) If the contingency plan has been implemented, was a written report filed with the Commissioner and were the Commissioner and other required authorities properly notified before operations resumed?	Yes	No
9.3.D.	20.	Have any amendments of the contingency plan been necessary? If yes, explain in comment section.	Yes	No
9.4.B.2.e. 5.4.E.1.	21.	Does the facility retain copies of all manifests, and inspection results for at least three years?	Yes	No
	22.	Does the TSD facility receive hazardous waste from off-site generators?	Yes	No
9.4.A.		If yes, has the TSD determined: NA	*	, .mi
5.5.C.2.a.		a) That manifests are completed, signed, and dated by the generator and each transporter for all shipments received	Yes	No
5.5.C.2.b.		b) That the manifest copies are signed and dated	Yes	No
5.5.C.2.d.		c) A copy has been given to the transporter	Yes	No
5.5.C.2.e.		d) A copy has been sent to the generator	Yes	No
5.5.C.2.f.		e) A copy has been retained and filed at the TSD facility.	Yes	No
9.4.B.	23.	Does the TSD facility have a written operating record which contains the following information:		
		For facility receiving off-site hazardous waste: N/A		
9.4.B.2.a.		a) A description of and the quantity of each hazardous waste received, and the method and date of treatment, storage or disposal? (Use Appendix 9.1)	Yes	No
		Storage		
		Treatment		
		Disposal,,		

Yes No

	-6-	
		Form "B"
	For facilities disposing of hazardous waste:	: <i>N/</i> A
9.4.B.2.b.	b) The location of each hazardous waste within the facility and the quantity at each location recorded on a map or diagram of each cell or disposal area?	t
	For all TSD facilities:	
9.4.B.2.c.	c) Detailed records and results of waste analyses and incineration trial tests performed on wastes coming into the facility? N/A	5
9.4.B.2.d.	d) Detailed operating summary reports and description of all emergency incidents that required the implementation of the facility contingency plan?	3
9.4.B.2.e. 9.1.F.4.	e) Detailed records and results of inspections performed on facility emergency equipment, TSD systems, and hazardous waste areas?	
9.4.B.2.f.	f) Detailed monitoring, testing, and analytical data where required?	l Yes No -
9.4.B.2.g.	g) All closure cost estimates, and for disposal facilities all post-closure cost estimates? Closure cost estimate, not acquare, according to interestion in closure for the closure cost Estimate \$ 9.595.00	
9.6. 2	Does the facility have a written closure plan which includes:	
9.6.C.1.b.	a) An estimate of the maximum waste inventory in storage or treatment at any time during life of facility?	
9.6.C.1.c.	b) A description of steps that will be used to decontaminate facility equipment?	Yes No
9.6.C.1.d.	c) An estimate of the expected year for closure?	Yes No
9.6.C.1.d.	d) A schedule for final closure?	Yes No
	e) A copy of the closure plan given to the inspector?	Yes No
9.7.C. 2.	For all TSD facilities, has financial assurance for closure for this facility been established?	Yes No

established?

		<pre>Instrument(s) used:</pre>		
	26.	Trust Fund Letter of Credit Performance Bond Financial Test Financial Guarantee Bond Certificate of Insurance Corporate Guarantee Facility has a Surely band for 10,000. Has a copy of all related documents been forwarded to the Virginia State Department of Health?	Yes	No
		* Submittal Date	•	-
		If no, was a copy of these documents provided to the inspector?	Yes	No
		If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	No
		Date by which a copy of these documents is to be mailed.		
9.7.G.	27.	Has liability coverage for <u>sudden</u> accidential occurrences** been established for this facility?	Yes	No
		<pre>Instrument(s) used:</pre>		
•		Certificate of Insurance Financial Test Liability Endorsement		
	28.	Has a copy of all related documents been forwarded to the Virginia State Department of Health? * Submittal Date	Yes	No

Non-sudden accidental occurrences: at least \$3 million per occurrence and \$6 million annual aggregate.

^{*} If the finanical test was used, all three (3) initially submitted items specified in § 9.7.C.5. must be updated within 90 days after the close of each succeeding fiscal year.

^{**} Sudden accidental occurrences: at least \$1 million per occurrence and \$2 million annual aggregate.

Form "B"

			rorm ,	
		If no, was a copy of these documents provided to the inspector?	Yes	No
		If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	No
		Date by which a copy of these documents is to be mailed.		
9.6.н.	29.	For landfills, surface impoundments, waste piles and land treatment facilities, does the facilities have a written post-closure plan that includes:		 -
9.6.H.1.a.	•	a) Groundwater monitoring activities?	Yes	No
9.6.H.1.b.	,	b) Maintenance activities to ensure containment?	Yes	No
9.6.H.1.c.		c) Name, address, and phone number of contact during post-closure period?	Yes	No
		d) Post-closure cost estimate?	Yes	No
		Amount \$		
9.7.E.	30.	For landfills, surface impoundments, waste piles and land treatment facilities, has financial assurance for post-closure care has been estimated?	Yes	No
		Instrument(s) used:		
		Trust Fund Letter of Credit Performance Bond Financial Test Financial Guarantee Bond Certificate of Insurance Corporate Guarantee		·
70 - 1480° - 1	31.	Has a copy of all related documents been forwarded to the Virginia State Department of Health?	Yes	No
		* Submittal Date	•	

^{*} If the finanical test was used, all three (3) initially submitted items specified in § 9.7.C.5. must be updated within 90 days after the close of each succeeding fiscal year.

-9-		
	Form	"B"
If no, was a copy of these documents provided to the inspector?	Yes	No
If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	No
Date by which a copy of these documents is to be mailed.		
9.7.G.2. 32 For landfills, surface impoundments and land treatment facilities has liability coverage** for nonsudden accidental occurrences been established?	Yes	No -
<pre>Instrument(s) used:</pre>	٠	
Certificate of Insurance Financial Test Liability Endorsement		We are a second
33. Has a copy of all related documents been forwarded to the Virginia State Department of Health?	Yes	No
* Submittal Date	-	
If no, was a copy of these documents provided to the inspector?	Yes	No
If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	No
Date by which a copy of these documents is to be mailed.		
9.5. 34. For landfills, surface impoundments, wastepiles (if closed as landfills) and land		
treatment facilities, has a groundwater monitoring program been implemented?	Yes	No
9.4.D. 35. Has an annual report been filed?	(es	No

^{*} If the financial test was used, all three (3) initially submitted items specified in § 9.7.C.5. must be updated within 90 days after the close of each succeeding fiscal year.

^{**} Sudden accidental occurrences: at least \$1 million per occurrence and \$2 million annual aggregate.

Non-sudden accidental occurrences: at least \$3 million per occurrence and \$6 million annual aggregate.

	36.	Comments:	
		-	
			110-410 AN-
Inspector's Name:		BENEÉ C Tyson Chemist	
Title:		Chemist	
Agency: <u>Va. State</u>	Healt	th Department, Bureau of Hazardous Waste Management	
		Fourteenth St., 11th Floor Monroe Building	
<u>R</u>	ichmo	ond, Virginia 23219	-
Date of Inspection	:	6/25/85	2
Inspector's Name:_			
Title:			
Agency: Va. State	lealt	h Department, Bureau of Hazardous Waste Management	
		Fourteenth St., 11th Floor Monroe Building nd, Virginia 23219	
Date of Inspection	·		

CHECKLIST FOR RCRA INSPECTION OF USE AND MANAGEMENT OF CONTAINERS

Name of Facility:	F	chria International		
Address: 901	North	4 Lambardy Street		-
:	mnn	d 10. 25227		
		: VAD089028 377		
Facility Inspecti	lon Rep	resentative: Poul Bouz		
, ,		Moniger		-
		355 - 7864		
Telephone Number:	<u> 80 1</u>			
The questions con hazardous waste § 6.4.E.l.a. that otherwise.	ntained facilit store	in this checklist apply to owners and operatories and generators accumulating less than 90 containers of hazardous waste, except as § 9.	ors of a days (i	ee ies
VA HWM Regs. Reference				
9.8.B.	1.	Are all containers in good condition, i.e., not showing signs of leakage or corrosion or any other deterioration/deformation?	Yes	No
9.8.C.	2.	Are containers lined or made of materials compatible with hazardous wastes placed into them so that the container will not react or corrode with the hazardous wastes?	Yes	No
9.8.D.1.	3.	Are all containers holding hazardous waste kept closed during storage?	Yes	No
9.8.E.	4.	Are areas where hazardous waste containers are stored inspected by the owner/operator at least once a week?	Yes	No
9.1.F.2.a. 9.1.F.4.	5.	Is an inspection log maintained? (See question #7 of TSD checklist.)	Yes	No
9.8.F.	6.	Are containers holding ignitable or reactive waste located at least 50 ft. from the facility's property line?	Yes	No
9.8.G.1.	7.	Are incompatible wastes placed in separate containers? (See APPENDIX 9.4 for examples of incompatible waste).	Yes	No

....

			rorm	1
9.8.G.3.	8.	Are storage containers holding hazardous wastes which are incompatible with nearby materials stored in containers, tanks, piles, or surface impoundments separated by dikes, berms, walls, or other devices?	Yes	No.
	9.	Comments:		
Tarantania Nama		-RENEE C. Tyson Chemist		
Inspector's Name	-	16		
Title:		CRMIST		
Agency: Va. Stat	te Heal	th Department, Bureau of Hazardous Waste Manag	ement	
Office Location:	: 101 N	. Fourteenth St., 11th Floor Monroe Building		
	Richm	ond, Virginia 23219		
Date of Inspect	ion:	6/25/86		
<u>-</u>				
-				
Inspector's Name	} :			
Title:				
Agency: Va. Stat	te Heal	th Department, Bureau of Hazardous Waste Manag	ement	
		. Fourteenth St., 11th Floor Monroe Building		
1 48	Richm	ond, Virginia 23219		
Date of Inspect:	ion:			

Mr. Beck

REHRIG INTERNATIONAL

RICHMOND PLANT

901 North Lombardy Street Richmond, Virginia 23220

(804) 355-7864

* Certified Mail - Return Receipt Requested No.

July 9, 1986

- -

Environmental Protection Agency Region III 841 Chestnut Building Philadelphia, PA 19107

ATTN: Ms. Mary Beck

Re: Topographic Map, our letter dated May 20, 1986.

Dear Ms. Beck:

Attached is the 7½ minute quad sheet which we received today.

Sincerely

D.P. Goodefl Vice President General Manager

Enclosures:

cc: Paul Bauz

Plating Manager

LEL/vc

CHECKLIST FOR SWMU RESPONSES

NAME OF FACILITY Representations
EPA ID No. VAD 08 902 8377

DID THE FACILITY SUB	MIT THE FOLLOWING DA	ATA:	
The location of all enits (SWMUs) on the	facility property ; Mapple 'A ?	(maps 1" = 200') - ree a by the fac.	TESNO YESNO
Information of the wa	aste handled at each	SWMU	YESNO
Data and descriptions each SWMU	of potential or pr	ior releases from	YESNO
Certification			YESNO
Description/Number of SWMUs (non RCRA regulated)			
Land Disposal		Incinerators	- 4 6
Land Treatment		Tanks / pit	+ lanks for
Surface Imp. Other		Drums Johns	me peatifique
Is there evidence of	contamination	pretreo	tment of nickel re plating operation
Groundwater	YESNO	Chron	ie plating operation
Surface water	YESNO		
Air	YESNO		
PRIORITY	1		
HIGHReported evidence of release to air, ground or surface water			
MEDIUMNo releases reported; but land based SWMUs reported			
LOWEverything el	s e		

COMMENTS:

SWMU RESPONSE

REHRIG INTERNATIONAL

RICHMOND PLANT

901 North Lombardy Street Richmond, Virginia 23220

(804) 355-7864

Certified Mail - Return Receipt Requister

May 20, 1986

Environmental Protection Agency Region III 841 Chestnut Building Philadelphia, PA 19107

ATTN: Ms. Mary Beck

Re: S.W.M.U. Disclosure (2 copies enclosed)

Rehrig International, Inc.

VAD 08-902-8377

Dear Ms. Beck:

The following is in response to your letter dated February 24, 1986:

(1). TOPOGRAPHIC MAP

As of this date we have not received the 7½ minute quad sheet from the Dept. of Interior. Attached are copies of our application. We will expedite the map to you immediately upon our receipt of it.

HISTORY OF BUILDING

The building was originally built in 1904 by Export Leaf Tobacco Company and was used as a tobacco leaf storage facility until 1977. Building was purchased in 1977 Bowe Street Associates, 1506 Bloomfield Road, Richmond, VA 23225. The building remained vacant from 1977 until 1979 when Rehrig International leased a portion of the building. Prior to the installation of Rehrig International's chrome plating line in 1980, there were no former solid waste units located in this building. The following is a history of Rehrig International's occupation of the building (please refer to attached plant layout):

A. 7-1-79 to 2-1-80 = Bays A1, B1, B2, & B3.

B. 2-1-80 to 5-1-82 = Add Bay A2.

C. 5-1-82 to 7-1-83 = Add Bay A3.

D. 7-1-83 to PRESENT = Add Bay's A4, A5, A6, B4, B5, B6, B7, & B8.

Rehrig International presently leases the entire building.



May 20, 1986

(2). <u>UNIT'S FUNCTION</u>: To receive waste water from the chrome plating operation and to pretreat for removal of metals from the nickel chrome plating operation.

MATERIAL OF CONSTRUCTION: Specially lined pit 10 ft. x

10 ft. x 10 ft. From this pit the water
is pumped through a series of lined tanks,
the last tank having a baffle for collecting sludge. Then the water is pumped
through a filter press.

DIMENSION CAPACITY &

ANCILLARY PIPING: All piping is CPVC, schedule 80. Capacity is 30 gallons per minute.

ENGINEERING DRAWINGS: None Available.

(3). <u>DESCRIPTION OF SOLID WASTE</u>: Waste water from nickel chrome plating operation.

QUANTITIES: Annual quantity of waste water passing through system is approximately 6500 ccf.

DATES OF OPERATION: Continually with the plating operation.

RELEASES: No releases of hazardous waste have ever been originated from this unit.

D.P. Goodell Vice President, General Manager

1

Enclosures

cc: Paul Bauz

Plating Manager

LEL/VC

	44 sq. ft. eas B1-B3)	, variance	
В2		9,335 sq. ft. A2	
В3		9,335 sq. ft. A3	
8,431 sq. ft. B4		8,840 sq. ft. A4	i e
8,431 sq. ft. B5		8,755 sq. ft. A5	Bowe Street
8,431 sq. ft. B6		8,840 sq. ft. A6	Second Floor A6 Office-2,132 sq. ft. Storage-6,800 sq. ft. (Day care)
8,323 sq. ft. B7			:
8,323 sq. ft. B8	Total g	round floor warehous	orth se - 128,486 sq. ft.

Lombardy Street

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

MAP ORDER BLANK

Αl		ON, VIRGINIA 22202		DATE:	4-29-86	<u> </u>
-		me REHRIG INTERNAT				
Str	eet Address	901 N. LOMBAROY	5+			
Cit	у	RICHMOND State	VA	Zip	Code 232	20
		ALPHABETIZE map names in state groups.	List THEMATIC	maps by Alpha-	Numeric number	
	Quantity	Map Name	State .	Scale	Unit Price	Total Price
1	.J	STANDARD TOPOGRAPHIC			\$	\$
2		QUANDRANCLE MAP	VA-	1:24,000'	2.50	5,00
3			RICHMOND			
4			~			
5		(Per area highlighted)				
6		in attached				
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9		-PLEASE RUSH-				·
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FROMPT, ACCURATE SHIPMENT PLEASE FILL IN THE FOLLOWING LABEL Please PRINT or TYPEWRITE

U.S. GEOLOGICAL SURVE**

1200 South Eada 22202

Arlington, Visionia 22202

Nam	REMER IN THE	TINAL	JNC		Š	**
Street Address .	901 N. LOMB				ry for the contract	Gettermine
City	RICHMOND	1	2	I/A	CONTRACTOR OF THE PARTY OF THE	うずられる



PAY TO THE ORDER OF DELLARS

SOVRANBANK
SOON BANK, MA Richmond, Virginia 22201

OR Attended

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150900 15098 1:0510000 171: 0200 9106 18

REHRIG INTERNATIONAL

RICHMOND PLANT

901 North Lombardy Street Richmond, Virginia 23220

(804) 355-7864

Certified Mail - Return Receipt Requested

May 20, 1986

Environmental Protection Agency Region III 841 Chestnut Building Philadelphia, PA 19107

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D.P. Goodell Vice President,

General Manager

Enclosures

cc: Paul Bauz

Plating Manager

LEL/vc

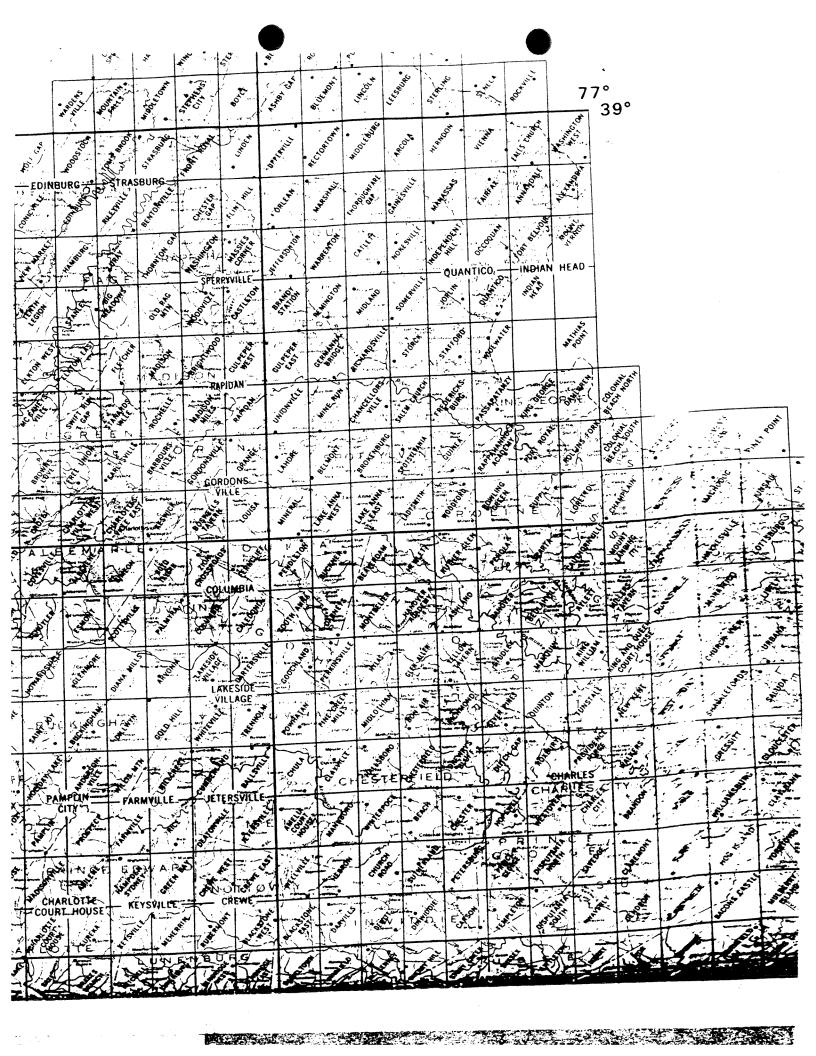
1		Ĭ
	44 sq. ft. eas B1-B3)	·
B1	Cus 21 23)	
В2	9,335 sq. ft. A2	
в3	9,335 sq. ft. A3	
8,431 sq. ft. B4	8,840 sq. ft. A4	·
8,431 sq. ft. B5	8,755 sq. ft. A5	Bowe Street
8,431 sq. ft. B6	8,840 sq. ft. A6	Second Floor A6 Office-2,132 sq. ft. Storage-6,800 sq. ft. (Day care)
8,323 sq. ft. B7		
8,323 sq. ft. B8	√ _N	orth
	Total ground floor warehous	e - 128,486 sq. ft.

Lombardy Street

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

MAP ORDER BLANK

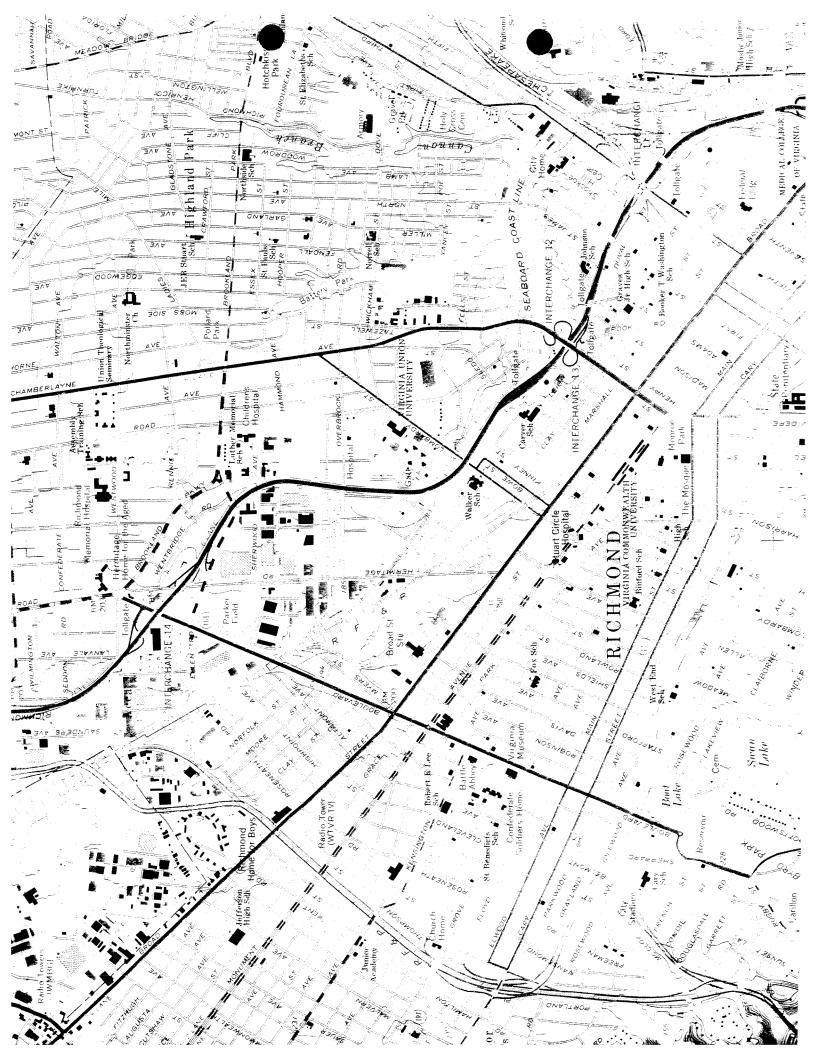
1	200 SOUT	LOGICAL SURVEY TH EADS STREET ON, VIRGINIA 22202		DATE:	4-29-86	4
F	'ROM: N	AME REHRIG INTERNAT	IUNAL I	WC		
S	treet Addres	901 N. LOMBARDU	5,			
С	ity	RICHMOND State	VA	Zij	p Code 232	20
		ALPHABETIZE map names in state groups.				
_	Quantity	Map Name	State	Scale	Numeric number. Unit Price	Total Price
_1	2	STANDARD TOPOGRAPHIC			\$	\$
2		QUANDRANCLE MAP	VA-	1:24,000'	2.50	5,00
3			RICHMOND		3.30	- , 0
4		10 0:11	~			
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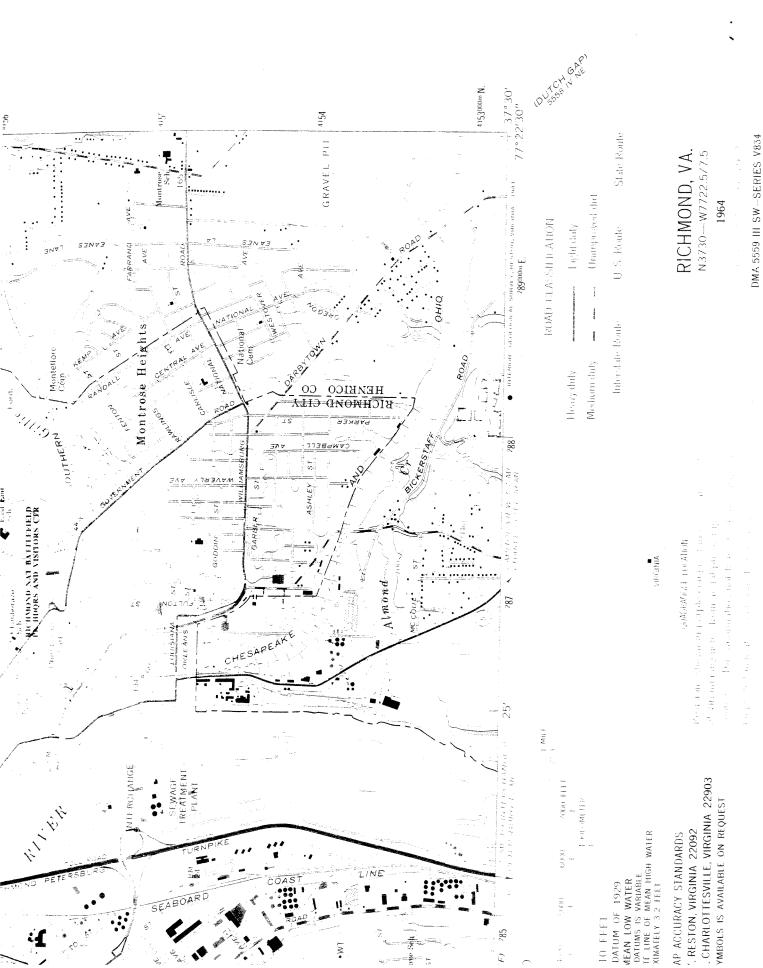


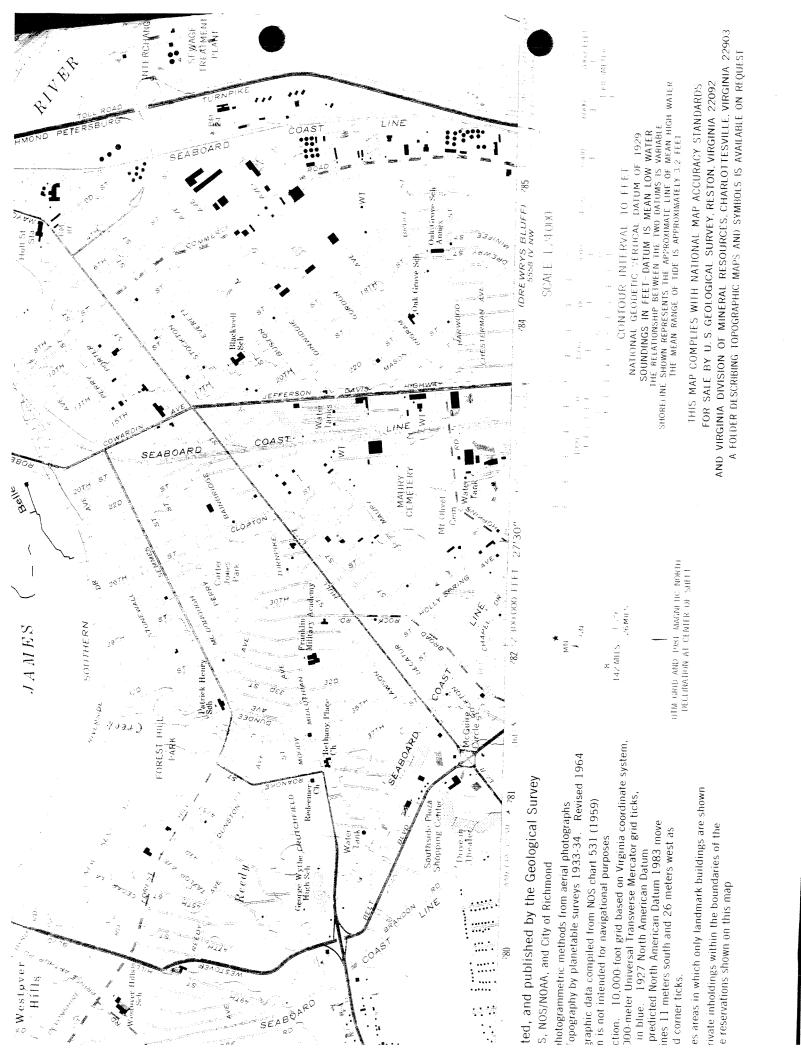
PAY
TO THE
ORDER OF DEPT, J. STATIONAL
SOVRANBANK
Somman Bank, M.A. Richmand, Virgenia 2220

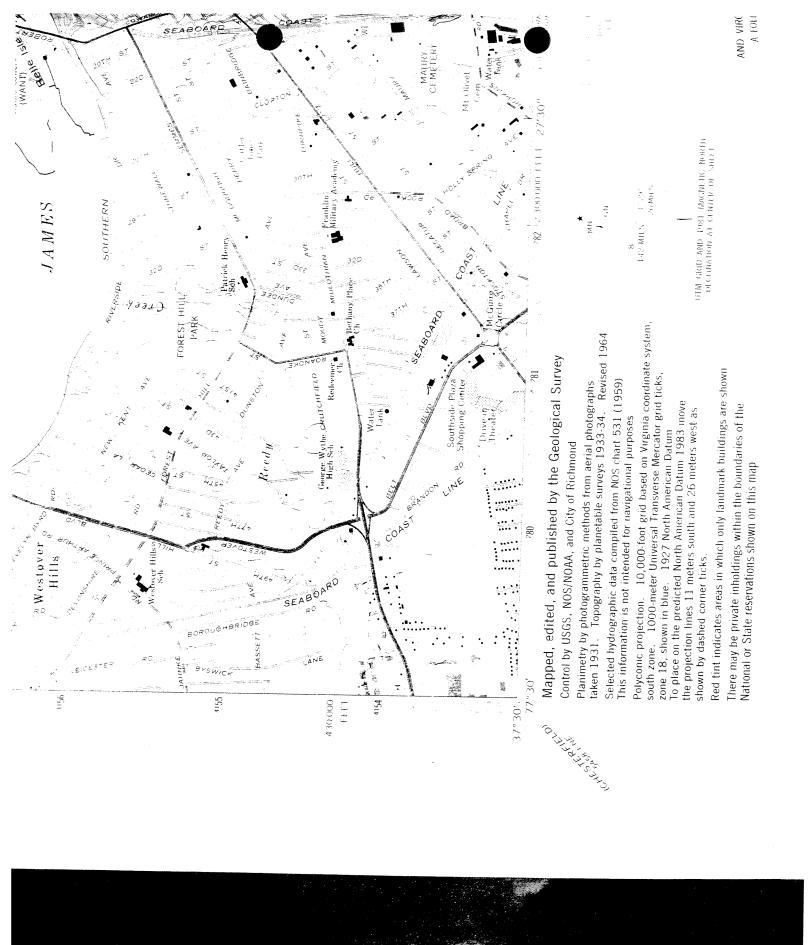
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OR MILLIN











UNITED STATES ENVIRONMENTAL PROTECTION REGION III

841 Chestnut Building Philadelphia, Pennsylvania 19:07

FEB 24 1986

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Philip Goodell Vice President Rehrig International Inc. 901 N. Lombardy Street Richmond, Virginia 23220

Re: Rehrig International Inc.

VAD 08 902 8377

Dear Mr. Goodell:

Sections 3004(u) and 3008(h) of the Hazardous and Solid Waste Amendments of 1984 (RCRA Reauthorization) give EPA the authority to require corrective action for all releases of hazardous wastes or constituents from any solid waste management unit ("SWMU") as defined on the enclosed sheet. This requirement applies to operating units, inactive units, as well as those that are closing or have been closed in the past.

EPA and the State must first determine the location of all SWMUs at your facility. Next, we must determine whether or not any "releases" (see definitions) originated at these units. In order to enable us to make these determinations, you must provide the following information:

- (1) A topographic map showing the facility and a distance of 1,000 feet around it, at a scale of one-inch equal to not more than 200 feet. In addition to showing the location of the hazardous waste management facilities for which you are seeking a permit, it must locate all existing and former SWMU's at your facility.
- (2) For each SWMU, provide a description of the unit's functions, material of construction, dimensions, capacity, ancillary systems (piping), etc. If available, provide engineering drawings of the units and their foundations. For closed facilities, also provide a copy of the closure plans, a description of how closure was performed and any relevant post-closure information you have available.
- (3) For each SWMU, provide a description of all solid wastes including hazardous wastes and hazardous waste constituents received by the units. Also, provide information on quantities of hazardous wastes and hazardous waste constituents received by each SWMU and the dates during which these units operated.

(4) For each SWMU, describe any releases (or possible releases) originating at the unit. This should include information on the date of release, type of solid waste, hazardous waste or hazardous waste constituents released, quantity released, nature of the release, extent of migration, and cause of release, for example, an overflow, broken pipe, tank leak, etc. Also, provide any available data which would quantify the nature and extent of environmental contamination including the results of soil, surface water and/or ground-water sampling and analysis efforts. Likewise, any monitoring information that indicates releases are not present should also be submitted.

If some or all the above requested information has been previously submitted to this office, please reference this information in your reply.

We request under Section 3007 of the Act, 42 U.S.C. §6927, that you submit two copies of the above listed information within forty-five (45) days of your receipt of this letter to both EPA and the Virginia Bureau of Solid and Hazardous Waste Management.

All information you submit should be certified as required by regulation 40 C.F.R. 270.11(d). Should you have any questions concerning this letter, please contact Ms. Mary Beck, P.E., at (215) 597-7239.

Sincerely,

Stephen R. Wasserson Director Hazardous Waste Management Division

Enclosure

cc: Mr. Wladimir Gulevich, Ph.D., P.E. Virginia Department of Health Bureau of Hazardous Waste Management

> Mr. Paul Bauz Plating Manager Rehrig International, Inc.

Definitions

Release - ...any spilling, leaking, pumping, pouring, emitting,
emptying, discharging, injection, escaping, leaching, dumping
or disposing into the environment.

Solid Waste Management Unit --

...any landfill, surface impoundment, waste pile, land treatment unit, incinerator, tank (including storage, treatment, and accumulation tanks), container storage units, injection wells, wastewater treatment units, elementary neutralization units, transfer station, and recycling units and any other solid waste management unit that received solid waste including hazardous waste or hazardous waste constituents at any time.

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AUGUST 19, 1986 INTERNAL MEMO – USEPA REGION III

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **REGION III**

841 Chestnut Building Philadelphia, Pennsylvania 19107

SUBJECT: RCRA Inspection -

VAD089028377

DATE: 8/19/86

FROM:

Traci I. Self, Environmental Engineer
DELMARVA, DC, WV RCRA Enforcement Section (3HW15)

TO:

FILE

THRU:

John A. Armstead, Chief

DELMARVA, DC, WV RCRA Enforcement Section (3HW15)

THE STATE IS TAKING ACTION TO RESOLVE THE VIOLATIONS IN THIS

INSPECTION REPORT.

WE WILL MONITOR THE STATE ACTIVITY REGARDING RESOLUTION OF THESE

VIOLATIONS.

OCTOBER 8, 1986
RCRA INSPECTION



COMMONWEALTH of VIRGINIA

DEPARTMENT OF WASTE MANAGEMENT 11th Floor, Monroe Building 101 N. 14th Street Richmond, Va. 23219

OCT 08 1986

CERTIFIED-RETURN RECEIPT REQUESTED

Larry E. Lewis
Rehrig International
901 North Lombardy Street
Richmond, VA 23220

Dear Mr. Lewis:

On September 24, 1986 your facility was reinspected in accordance with the Virginia Hazardous Waste Management Regulations (VHWMR). During this visit it was noted that the facility had made significant improvements in complying with hazardous waste requirements; however, there are still a few areas that are not in total compliance with the Regulations. These deficiencies are indicated on the enclosed checklists.

Please take the appropriate corrective action for bringing your facility in total compliance with the regulations by November 10, 1986.

Thank you for your cooperation during this visit. If you have any questions regarding this matter please call me at (804) 225-2667.

Sincerely,

Reneė C. Tyson, Chemist

Bureau of Hazardous Waste Management

Enclosure

Name of Facility: Rehrig Internation	nal
Address: 90 North Lambardy	btract
Richmond, Virginia 23	3220
EPA Generator ID Number: VAD089028	7377
Facility Inspection Representative: Pol	1/ Bauz
Title: Plating Manager	
Telephone Number: (8/14) 355-78/04	
1. What is business activity of firm? recycling, etc.) Manufactura	i,e., furniture mfg., metal plating,
2. Give brief description of waste stream Nickel-chrome plating sluce	(s) and code designation(s). <u>Fool</u>
3. List the amounts of hazardous waste ge	enerated, recycled and accumulated.
3. List the amounts of hazardous waste ge	enerated, recycled and accumulated.
3. List the amounts of hazardous waste ge	
a. Characteristic - Ignitable (D001) Corrosive (D002) Reactive (D003) EP Toxic (D004- D017)	tal nerated #/mo (1) tal cycled #/mo (2) fference #/mo (3) minus (2) sgulated #/mo (5) tal ccumulated #/mo (5) tal ccumulated #/mo (5)
a. Characteristic - Ignitable (D001) Corrosive (D002) Reactive (D003) EP Toxic (D004-	tal nerated #/mo (1) tal cycled #/mo (2) fference #/mo (3) minus (2) sgulated #/mo (5) tal ccumulated #/mo (5) tal ccumulated #/mo (5)
a. Characteristic - Ignitable (D001) Corrosive (D002) Reactive (D003) EP Toxic (D004- D017)	tal nerated #/mo (1) tal cycled #/mo (2) fference #/mo (3) minus (2) sgulated #/mo (5) tal ccumulated #/mo (5) tal ccumulated #/mo (5)

4.	Based on the above information, the company is classified as:
	a. Small quantity generator exempt from regulations. (Form C)
	b. Recycler not exempt from regulations. (Form A)
(Generator. (Form A)
5.	If facility treats, stores or disposes on-site complete Form B (unless exempt under § 9.).
6.	Complete the apporpriate checklists.
	Container (Form I) Surface Impoundment (Form K) Tank (Form J) Incineration & Thermal Treatment (Form O & P)
	Landfill (Form N) Physical, Chemical & Biological Treatment (Form Q)
Ins	spector's Name: RENFE Colyson tle: Chomist
	tle: Chomist
	ency: Department of Waste Management
	fice Location: 101 N. Fourteenth St., 11th Floor Monroe Building Richmond, Virginia 23219
Da	te of Inspection: $9/24/86$

	Survey
Inspector's Name:	
Title:	
Agency: Department of Waste Management	
Office Location: 101 N. Fourteenth St., 11th Floor Monroe Building	
Richmond, Virginia 23219 Date of Inspection:	

(Yes)

No

			4/1/00	
CHEC	KLIST	FOR RCRA INSPECTION OF GENERATORS		
Name of Facility:	11			
Address: 901 NO	rth -	Lemberay Street		
Richmon	od_	Virginia 23220		
EPA Generator ID Numb				·
Facility Inspection R	eprese	entative: Bul Bouz		
Title: Platina	Mark	NGRC		
Telephone Number: (2	304) 3	55-7864		
VA HWM Regs. Reference:				
6.3	gen	a manifest system currently used by the erator so that off-site shipment of ardous wastes can be tracked?	Yes	No
2	. Is man	the following included on the generators ifest?		
5.3.B.1.	a)	The generator's name, address, telephone number and EPA ID number.	Yes	No
5.3.B.2.	p)	A unique five digit number assigned to this manifest by the generator.	Yes	No
5.3.B.3.	c)	Total number of pages used to complete the manifest.	Yes	No
5.3.B.4.	d)	The company name and EPA identification of each transporter.	Yes	No
5.3.B.5.	e)	The company name, site address and the EPA ID number of the facility designated to receive the waste listed on the manifest.	Yes	No
5.3.B.6.	f)	The U.S. DOT description of each waste to include its proper shipping name, hazard class, and ID number (UN/NA), as		

identified in the Virginia Regulations Governing the Transporation of Hazardous

Materials.

		-2- FORM	"A"
5.3.B.7.		g) The units of weight or volume and the type and number of containers loaded in the transport vehicle included on the manifest form?	Yes No
5.3.B.8.		h) In case of international shipment, the point of departure (city & state) for those shipments destined for treatment, storage, and disposal outside the jurisdication of the United States.	Yes No
5.3.C.		i) The following certification noted on the generator's manifest form and is the certification acknowledged by the generator's signature.	
		"I hereby declare that the content of this consignment are fully and accurately discribed above by proper shipping name and are classified packed, marked, and labled, and condition for	
		transport by [mode of transportion] according to applicable international and national governmental regulations."	Yes No
6.5.C.2.	3.	Have manifest been received from TSD for waste shipped over 45 days ago.	Yes No
		if not, has the generator filed an exception report?	Yes No
5.5.A.7.	4.	Did the generator determine that the transporter has a Virginia transporter permit?	Yes No
6.4.E.1.	5.	Is hazardous waste being accumulated on-site by the generator for less than 90 days? If yes, N/A (Therm some for strong in comments)	Yes No
6.4.E.l.a.		a) Is the waste placed in either <u>containers</u> or tanks? (If yes, fill out appropriate checklist. If no, TSD permit is required.)	Yes No
6.4.E.1.b.	·	b) Is the date accumulation of waste began clearly and visibly marked on each container and, does it indicate accumulation for less than 90 days?N/A	Yes No

		-3-	Form	"A"
		2		
6.4.E.1.c.		c) During accumulation, are the storage containers and/or tank clearly labeled with the words Hazardous Waste? N/t	Yes	No
9.1.G.1.		Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures?	Yes	No
9.1.G.2.	7.	Have new employees to the facility successfully completed training mentioned above within 6 months of their employment or assignment to the facility? This should be decument in four facing outlined.	tes	No
9.1.G.3.	8.	Do personnel participate in an annual review of their initial training?	Yes	No
9.1.G.4.a.	9.	Does the facility maintain a record of:		
		(a) job titles for personnel that are involved with hazardous waste management; and Poing Manager minuscol	Yes (No /
		(b) the name of the employee filling each job? Ploting Manager por mickeds	Yes	Nov
9.1.G.4.b.	10.	Does the facility have on record a written position description for each job title noted in Question #9? Playing Manager 12 10 10 10 10 10 10 10 10 10 10 10 10 10	Yes	No V
9.1.G.4.c.	11.	Does the facility maintain a written description of the type and amount of introductory and continuing training for those employees involved in hazardous waste management? Plana Marger 100 100 14000.	Yes	\sim
9.1.G.4.d.	12.	Does the facility have records to document this training? Place develope a training outline, no records for pasting manager.	Yes	No V
9.2.B. 9.2.D.	13.	At the facility, is the following equipment installed:		
9.2.B.1.		a) An internal communications or alarm system capable of providing immediate emergency instructions to facility personnel if the hazardous waste storage area is threatened by fire or explosion?	Yes	No

9.2.B.2.		b) A device at the scene of hazardous waste generator operations capable of summoning emergency assistance from Police, Fire departments, etc.?	Yes	No
9.2.B.(3, 4)		c) Portable fire extinguishers, fire control, spill control, and decontamination equipment and water at adequate volume and pressure to supply expected fire demands, foam producing equipment, automatic sprinklers or water spray system?	Yes	No
9.2.C.	14.	Is a record of tests and inspections of required equipment (question 11) maintained at the facility?	Yes	No
9.2.F.	15.	Does the facility have adequate aisle space to allow the unobstructed movement of personnel and equipment during emergencies?	Yes	No
9.3.A.1. 6.4.E.1.d.	16.	Does the facility have an established contingency plan to deal with any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to the air, soil, groundwater or surface water?	Yes	No
9.3.	17.	Does the contingency plan contain the following elements:		
9.3.B.(1, 2)		a) A detailed description of emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, and water?	Yes	No
9.3.B.4.		b) A listing of names, addresses, and phone numbers of the generator facility emergency response coordinators? List primary coordinator.	Yes	No
		Name Pay Bauz		
		Title Playing Manager		
		Telephone 355 - 7864		

			POLM	
9.3.B.5.	c)	A list of appropriate emergency equipment necessary to cope with emergencies at the generator facility?	Yes	No
9.3.B.5.	d)	Does this list specify the location and physical description of each item on the list and a brief description of each item on the list, and a brief outline of its capabilities.	Yes	No V
9.3.8.6.	e)	An evacuation plan for the generator facility where there is a possibility that evacuation could be necessary?	Yes	No
9.3.C.	f)	Have copies of the contingency plan been sent to all local police departments, fire departments, hospitals and Commonwealth and local emergency response teams? List:	(les)	No
		Richmond Are Dept.		
			v.	
9.3.B.		1) Is there documentation to indicate the personnel listed above received the contingency plan?	Yes	No
9.3.F.(9, 10)	g)	If the contingency plan has been implemented, was a written report filed with the Commissioner and were the Commissioner and other required authorities properly notified before operations resumed?	Yes	No ·
6.5.A.	m f	oes the facility retain copies of all anifests, annual reports, and test results or at least three years? Facily the developed of the particular tensors.	Yes	No
6.5.B.	10 Ц	as the facility submitted an annual report or the preceding calendar year?	Yes	No

20.	Comments
	`
Inspector's Name:	RENER C. Tyson Chemist
Title:	Chemist
Agency: Va. State Heal	th Department, Bureau of Hazardous Waste Management
Office Location: 101 h	N. Fourteenth St., 11th Floor Monroe Building
Date of Inspection:	
Title:	
	lth Department, Bureau of Hazardous Waste Management
Office Location: 101	N. Fourteenth St., 11th Floor Monroe Building mond, Virginia 23219
Date of Inspection:	

CHECKLIST FOR RCRA INSPECTION OF TREATMENT, STORAGE & DISPOSAL (TSD) FACILITIES

•	01	rin International		
Name of Facility:	Ken	to a second seco		
Address: 901	Nor	th Lombardy Street		
Richm	ond	, Virginia 23220		particular de la constanta de
F.P.A. I.D. Hamber		9028377		
Facility Inspection	n Rep	resentative: <u>Bul Bauz</u>		
Title: Plating				
Telephone: (<u>904</u>)		2-1801		
VA HWM Regs. Reference	1.	The facility: treats, stores, disposes (Circle as appropriate)		. -
9.1.C.1.	2.	Does the facility receive hazardous waste from a foreign source?	Yes	No
		If yes, has the facility notified the Executive Director of the date of arrival?	Yes	No
9.1.D.(1, 2, 3)	3.	Does the facility have a detailed chemical and physical analysis of a representative sample of the waste?	Yes	No
9.1.D.5.	4.	Does the facility have a waste analysis plan which specifies the following:	Yes	No
		a) the parameters for each hazardous waste;	Yes	No
		b) test methods for each parameter;	Yes	No
		 c) the sampling method used to obtain a representative sample; 	Yes	No
		d) frequency to review initial analysis.	Yes	No
9.1.D.6.	5.	off-site, does the plan specify proceed and sampling methods to ensure that the		
		waste matches the identity of designated on the accompanying manifest or shipping paper?	Yes	No
9.1.E.1.	6.	waste injure unknowing persons of five	Yes) No
		If yes, does the TSD facility have:		

9.1.E.2.a.		a)	a 24-hour surveillance system which monitors and controls entry to the active portion of the facility?	Yes	No
9.1.E.2.a.(1)		b)	an artificial or natural boundary which surrounds active portions of the facility? and,	Yes	No
9.1.E.2.a.(2)			a means to control entry at all times? (i.e., gates, attendants, locked entrances, etc.)	Yes	No
9.1.E.3.		d)	a restricted access sign posted at each entrance to the active portion of the facility?	Yes	No
			Is sign legible from a distance of 25 feet?	Yes	No
			Is sign in English and any other foreign language predominant to the geographical area?	Yes	No
9.1.F.2.a.	7.	scl nec	es the TSD facility have a written nedule for inspecting all equipment cessary for prevention, detection or sponse to environmental or human health eards?	(es)	No
9.1.F.2.c.		a)	Does the schedule identify the types of problems which are to be looked for during the inspection?	Yes	No
9.1.F.2.d.		ъ)	Does the schedule include frequency of these inspections?	Yes	No
9.1.G.1.	8.	cor	ve the facility personnel successfully npleted a program of classroom training or the-job training in hazardous waste nagement procedures?	Yes	No
9.1.G.2.	9.	su ab	ve new employees to the facility cessfully completed training mentioned ove within 6 months of their employment or signment to the facility? This should be docume the facility? This should be documed the facility?	/ 1	· No
9.1.G.3.	10.	Do	personnel participate in an annual review their intitial training?	Yes	No
9.1.G.4.a.	11.	jo wi na	es the facility maintain a record of (a) b titles for personnel that are involved th hazardous waste management and (b) the me of the employee filling each job?		(No)

9.1.G.4.b.	12.	Does the facility have on record a written position description for each job title noted in Question #11? Placed March of 12000000	Yes	No
9.1.G.4.c.	13.	Does the facility maintain a written description of the type and amount of introductory and continuing training for those employees involved in hazardous waste management? The training for the continuing training for the continuing training for the continuing training trai	Yes	No V
9.1.G.4.d.	14.	Does the facility have records to document this training? Please develope a formed survey of the fallowing equipment	Yes	No V
9.2.B. 9.2.D.	15.	At the facility, is the lollowing equipment installed:		
9.2.B.1.		a) An internal communications or alarm system capable of providing immediate emergency instructions to facility		
		personnel if the hazardous waste storage area is threatened by fire or explosion?	Yes	No No
9.2.B.2.		b) A device at the scene of hazardous waste operations capable of summoning emergency assistance from Police, Fire departments, etc.?	Yes) No
9.2.B.(3, 4)		c) Portable fire extinguishers, fire control, spill control, and decontamination equipment and water at adequate volume and pressure to supply		
		expected fire demands, loam producting equipment, automatic sprinklers or water spray system?	Yei	s) No
9.2.C.	16	required equipment (question 13) maintains at the facility?	Ye	g) No
9.2.E.	17	to allow the unobstructed movement or personnel and equipment during emergencies?	Ýе	s No
9.3.A.1.	18	contingency plan to deal with any displacements sudden or nonsudden release of hazardous waste or hazardous waste constituents to the air, soil, groundwater or surface water that may impact hazardous waste currently in storage at the facility?	i i Ye	es No
9.3.	19	Does the contingency plan contain the following elements:	<u>;</u>	e

9.3.B.(1, 2)	a)	A detailed description of emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, and water?	(Yes)	No
9.3.B.3.	b)	A detailed description of arrangements formally agreed to by local police, fire departments, and state and local emergency teams to provide assistance during emergency situations?	Yes	No
9.3.B.4. 9.3.E.	c)	A listing of names, addresses, and phone numbers of the generator facility emergency response coordinators? List primary coordinator.	Yes	No -
		Name Paul Bourz Title Playing Manager Telephone 355-1864		
9.3.B.5.	d)	A list of all required emergency equipment necessary to cope with emergencies at the generator facility?	Yes	No
9.3.B.5.	e)	Does this list specify the location and of each item on the list, and a brief description of each item on the list, and a brief outline of its capabilities?	Yes	(No) 🗸
9.3.C.	f)	Have copies of the contingency plan been sent to all local police departments, fire departments, hospitals and Commonwealth and local emergency response teams? List:	(Yes)	No
9.3.B.		1) Is there documentation to indicate the personnel listed above received the contingency plan?	(es	No

9.3.F.(9, 10)			If the contingency plan has been implemented, was a written report filed with the Executive Director and were the Executive Director and other required authorities properly notified before operations resumed?	Yes	No
9.3.D.	20.	been	any amendments of the contingency plan necessary? If yes, explain in comment ion.	Yes	No
9.4.B.2.e. 5.4.E.1.	21.	man	s the facility retain copies of all ifests, and inspection results for at three years?	(es)	No
	22.	Doe was	s the TSD facility receive hazardous te from off-site generators?	Yes	No
9.4.A.		If :	yes, has the TSD determined:		
5.5.C.2.a.		a)	That manifests are completed, signed, and dated by the generator and each transporter for all shipments received	Yes	No
5.5.C.2.b.	T.	b)	That the manifest copies are signed and dated	Yes	No
5.5.C.2.d.		c)	A copy has been given to the transporter	Yes	No
5.5.C.2.e.		d)	A copy has been sent to the generator	Yes	No
5.5.C.2.f.		e)	A copy has been retained and filed at the TSD facility.	Yes	No
9.4.B.	23.	0.0	es the TSD facility have a written erating record which contains the llowing information: N/A		
		For wa	r facility receiving off-site hazardous ste: N/A		
9.4.B.2.a.		a)	A description of and the quantity of each hazardous waste received, and the method and date of treatment, storage or disposal? (Use Appendix 9.1)	Yes	No
			Storage,,		
			Treatment,,		
			Disposal,,		

		For	facilities disposing of hazardous waste:		
9.4.B.2.b.		ъ)	The location of each hazardous waste within the facility and the quantity at each location recorded on a map or diagram of each cell or disposal area?	Yes	No
		For	all TSD facilities:		
9.4.B.2.c.		c) '	Detailed records and results of waste analyses and incineration trial tests performed on wastes coming into the facility? N/A	Yes	No
9.4.B.2.d.		d)	Detailed operating summary reports and description of all emergency incidents that required the implementation of the facility contingency plan?	Yes)	No
9.4.B.2.e. 9.1.F.4.		e)	Detailed records and results of inspections performed on facility emergency equipment, TSD systems, and hazardous waste areas?	Yes	No
9.4.B.2.f.	1	f)	Detailed monitoring, testing, and analytical data where required?	Yes	No
9.4.B.2.g.		g)	All closure cost estimates, and for disposal facilities all post-closure cost estimates?	Yes	No
			Closure Cost Estimate \$ 9,900		
9.6.	24.	Doe pla	s the facility have a written closure n which includes:		
9.6.C.1.b.		a)	An estimate of the maximum waste inventory in storage or treatment at any time during life of facility?	Yes	No
9.6.C.1.c.		b)	A description of steps that will be used to decontaminate facility equipment?	Yes	No
9.6.C.1.d.		c)	An estimate of the expected year for closure?	Yes	No
9.6.C.1.d.		d)	A schedule for final closure?	Yes	No
		e)	A copy of the closure plan given to the inspector?	Yes	No
9.7.C.	25.	ass	all TSD facilities, has financial urance for closure for this facility been ablished?	(Yes)	No

		<pre>Instrument(s) used:</pre>		
		Trust Fund Letter of Credit Performance Bond Financial Test Financial Guarantee Bond Certificate of Insurance Corporate Guarantee		
	26.	Has a copy of all related documents been forwarded to the Virginia State Department of Health?	Yes	No
		* Submittal Date		
	۵	If no, was a copy of these documents provided to the inspector?	Yes	No
		If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	No
	·	Date by which a copy of these documents is to be mailed.		
9.7.G.	27.	Has liability coverage for <u>sudden</u> accidential occurrences** been established for this facility?	Yes	No
		Instrument(s) used: Certificate of Insurance Financial Test Liability Endorsement		
	28.	Has a copy of all related documents been forwarded to the Virginia State Department of Health?	Yes	No
		* Submittal Date		

occurrence and \$6 million annual aggregate.

^{*} If the finanical test was used, all three (3) initially submitted items specified in § 9.7.C.5. must be updated within 90 days after the close of each succeeding fiscal year.

^{**} Sudden accidental occurrences: at least \$1 million per occurrence and \$2 million annual aggregate. Non-sudden accidental occurrences: at least \$3 million per

		If no, was a copy of these documents provided to the inspector?	Yes	No
		If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	No
		Date by which a copy of these documents is to be mailed.		
9.6.H.	29.	For landfills, surface impoundments, waste piles and land treatment facilities, does the facilities have a written post-closure plan that includes: NA		
9.6.H.l.a.		a) Groundwater monitoring activities?	Yes	No
9.6.H.l.b.		b) Maintenance activities to ensure containment?	Yes	No
9.6.H.1.c.		c) Name, address, and phone number of contact during post-closure period?	Yes	No
		d) Post-closure cost estimate?	Yes	No
		Amount \$		
9.7.E.		For landfills, surface impoundments, waste piles and land treatment facilities, has financial assurance for post-closure care has been estimated? N/A	Yes	No
		Instrument(s) used:		
		Trust Fund Letter of Credit Performance Bond Financial Test Financial Guarantee Bond Certificate of Insurance Corporate Guarantee		
	31.	Has a copy of all related documents been forwarded to the Virginia State Department of Health? N/A	Yes	No
		* Submittal Date		

^{*} If the finanical test was used, all three (3) initially submitted items specified in § 9.7.C.5. must be updated within 90 days after the close of each succeeding fiscal year.

Form "B"

No

		If no, was a copy of these documents provided to the inspector?	Yes	No
		If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	No
		Date by which a copy of these documents is to be mailed.		
9.7.G.2.	32.	For landfills, surface impoundments and land treatment facilities has liability coverage** for nonsudden accidental occurrences been established?	Yes	No
		<pre>Instrument(s) used:</pre>		
		Certificate of Insurance Financial Test Liability Endorsement		
	33.	Has a copy of all related documents been forwarded to the Virginia State Department of Health? N	Yes	No
		* Submittal Date		
		If no, was a copy of these documents provided to the inspector?	Yes	No
		If no, will a copy of these documents be mailed to the Virginia State Department of Health?	Yes	No
		Date by which a copy of these documents is to be mailed.		
9.5.	34.	wastepiles (if closed as landills) and land	. V	No
		monitoring program been implemented?	res	NO
			ATY	N T -

^{*} If the financial test was used, all three (3) initially submitted items specified in § 9.7.C.5. must be updated within 90 days after the close of each succeeding fiscal year.

35. Has an annual report been filed?

9.4.D.

^{**} Sudden accidental occurrences: at least \$1 million per occurrence and \$2 million annual aggregate.

Non-sudden accidental occurrences: at least \$3 million per occurrence and \$6 million annual aggregate.

36. Comments:	
spector's Name: RENEE C. Tyson tle: Chemist	
tle: <u>Chemist</u>	
ency: Department of Waste Management	
fice Location: 101 N. Fourteenth St., 11th Floor Monroe Building	
Richmond, Virginia 23219 te of Inspection: $9/24/86$	
spector's Name:	
tle:	
ency: Department of Waste Management	
fice Location: 101 N. Fourteenth St., 11th Floor Monroe Building	
Richmond, Virginia 23219	
te of Inspection:	

CHECKLIST FOR RCRA INSPECTION OF USE AND MANAGEMENT OF CONTAINERS Pahaia Tolorian

Name of Facility:	K	priq International		
Address: 901	Noct	h Lombardy Street		
Richme	nd	Vicginia 23220		a manage o compa
EPA Generator ID N	/ lumbe:	r: <u>VAD08902-8377</u>		
		presentative: Poul Bouz		
Title: Phina				
,		(1) 355-7834	-	
bazardane waste f	acili	d in this checklist apply to owners and operato ties and generators accumulating less than 90 containers of hazardous waste, except as § 9.	days (see
VA HWM Regs. Reference				
9.8.B.	1.	Are all containers in good condition, i.e., not showing signs of leakage or corrosion or any other deterioration/deformation?	(les)	No
9.8.C.	2.	Are containers lined or made of materials compatible with hazardous wastes placed into them so that the container will not react or corrode with the hazardous wastes?	Yes	No
9.8.D.1.	3.	Are all containers holding hazardous waste kept closed during storage?	Yes	No
9.8.E.	4.	Are areas where hazardous waste containers are stored inspected by the owner/operator at least once a week?	(Yes)	No
9.1.F.2.a. 9.1.F.4.	5.	Is an inspection log maintained? (See question #7 of TSD checklist.)	Yes	No
9.8.F.	6.	Are containers holding ignitable or reactive waste located at least 50 ft. from the facility's property line?	Yes	No
9.8.G.1.	7.	Are incompatible wastes placed in separate containers? (See APPENDIX 9.4 for examples of incompatible waste). N/A	Yes	tio

9.8.G.3.	8.	Are storage containers holding hazardous wastes which are incompatible with nearby materials stored in containers, tanks, piles, or surface impoundments separated by dikes, berms, walls, or other devices?	Yes	N
	9.	Comments:		
AND NOTE THAT AND THAT AND				
		, and the second		
Inspector's Name:		RENEE C. Tyson		
Title:	,	Chemist		
Agency: Department	t of V	Naste Management		
Office Location: 1	01 N. Richmo	Fourteenth St., 11th Floor Monroe Building ond, Virginia 23219		
Date of Inspection	n:	9/26/86	,	
		7-7-		
Inspector's Name:				
Title:				
Agency: Department	of W	aste Management		
Office Location: $\frac{1}{R}$	01 N.	Fourteenth St., 11th Floor Monroe Building and, Virginia 23219		
Date of Inspection	1:			

OCTOBER 16, 1986 INTERNAL MEMO – USEPA REGION III

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **REGION III**

841 Chestnut Building Philadelphia, Pennsylvania 19107

SUBJECT: RCRA Inspection - Rely International dichard the DATE: 10/16/86

VAD089028377

FROM:

Traci I. Self, Environmental Engineer

DELMARVA, DC, WV RCRA Enforcement Section (3HW15)

TO:

FILE

THRU:

John A. Armstead, Chief

DELMARVA, DC, WV RCRA Enforcement Section (3HW15)

THE STATE IS TAKING ACTION TO RESOLVE THE VIOLATIONS IN THIS

INSPECTION REPORT.

WE WILL MONITOR THE STATE ACTIVITY REGARDING RESOLUTION OF THESE **VIOLATIONS.**

Class II - CUPC - NO schedule for closure ClassII - CUPC - Elecomplete Training Records

JUNE 2, 1988 RCRA INSPECTION

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 841 Chestnut Building Philadelphia, Pennsylvania 19107

SUBJECT: RCRA Inspection

DATE:

4/2/80

Facility: ID #:

-- "

Charlene C. Harrison, Environmental Engineer

DELMARVA/DC/WV RCRA Enforcement Section (3HW15)

TO:

FROM:

FILE

THRU:

Victoria P. Binetti, Chief M L 2 161
DELMARVA/DC/WV RCRA Enforcement Section (3HW15)

BASED UPON A REVIEW OF THE RCRA INSPECTION REPORT FOR THE FACILITY REFERENCED ABOVE, I HAVE DETERMINED THAT

NO FURTHER ACTION IS REQUIRED AT THIS TIME.

MARCH 24, 1989

LETTER FROM VIRGINIA DEPARTMENT OF WASTE MANAGEMENT TO REHRIG INTERNATIONAL



COMMONWEALTH of VIRGINIA

DEPARTMENT OF WASTE MANAGEMENT
11th Floor, Monroe Building
101 N. 14th Street
Richmond, VA 23219
(804) 225-2667

MAR 24 1989

CERTIFIED - RETURN RECEIPT REQUESTED

Paul Bauz, Plating and Waste Manager Rehrig International 901 North Lombardy Street Richmond, Virginia 23220

Dear Mr. Bauz:

The closure plan for your facility was received by the Department on February 28, 1989. With the enclose notice of public comment to be published in the <u>Richmond Times Dispatch</u>, the Department is initiating the administrative action required under Sections 9.6 and 11.3 of the Virginia Hazardous Waste Management Regulations regarding closure and termination of interim status. We are also providing a copy of the fact sheet prepared for this comment period.

If you have any questions, please contact Glenn Moore at (804) 225-3754.

Sincerely,

Karol A. Akers, Technical Service Chief

Division of Technical Services

Enclosure

cc: William H. Schremp, EPA

FACT SHEET

Notice of Closure and Termination of Interim Status

Name and Address of Applicant:

Mr. Paul Bauz

Rehrig International, Inc. 901 North Lombardy Street

Richmond, Virginia 23220

Name and Address of Facility:

Rehrig International, Inc. 901 North Lombardy Street

Richmond, Virginia 23220

<u>EPA I D #:</u>

VAD089028377

Description of Facility and Action: The above facility has, since November 19, 1980, operated a hazardous waste management facility subject to regulations promulgated under the Resource Conservation and Recovery Act. This facility qualified for interim status for storage of hazardous waste in containers, which is conferred in the Act and allows a facility to operate until final disposition of its permit application. On April 1, 1988, the Department of Waste Management requested from this facility its complete permit application. By letter of October 13, 1988, the facility indicated that it would no longer operate as a hazardous waste management facility, so it would not be submitting the permit application. A closure plan, submitted on February 24, 1989, provides for closure of this hazardous waste management facility. The action proposed is approval of the closure plan under Section 9.6 and termination of interim status under Section 11.3 of the Virginia Hazardous Waste Management Regulations.

Comment Period: April 15, 1989 through May 14, 1989. The closure plan can be viewed at the address given below and at the Rehrig International, Inc. facility. All persons, including the applicant, who believe that the proposed action is inappropriate must raise all ascertainable issues and submit all available arguments and factual grounds supporting their position by May 14, 1989. Two Copies of such documents should be sent to the Department of Waste Management, Division of Technical Services, Eleventh Floor, Monroe Building, 101 North Fourteenth Street, Richmond, Virginia 23219

Contact: Department of Waste Management
Division of Technical Services
Attention: Glenn Moore
Eleventh Floor, Monroe Building
101 North Fourteenth Street
Richmond, Virginia 23219
Phone (804) 225-3754

COMMONWEALTH OF VIRGINIA DEPARTMENT OF WASTE MANAGEMENT, DIVISION OF TECHNICAL SERVICES NOTICE OF TERMINATION OF INTERIM STATUS AND OPPORTUNITY TO COMMENT ON CLOSURE PLAN FOR REHRIG INTERNATIONAL, INC. RICHMOND, VIRGINIA

Pursuant to the authority granted to the Board of Waste Management by Section 10-1427 of Title 10.1 of the Code of Virginia (1950), as amended, notice is given of a public comment period, to last until May 14, 1989.

During this period, any interested person may submit written comments on the closure plan and proposed termination of interim status. Any request for public hearing on this action must be in writing and must state the nature of the issues to be raised.

The closure plan may be viewed at the address given below and at Rehrig International, Inc. Written comments may be sent to, and copies of the fact sheets obtained from the Department of Waste Management, Division of Technical Services, 101 North Fourteenth Street, Richmond, Virginia 23219. For more information call Glenn Moore at (804) 225-3754.

AUGUST 2, 1989 PRELIMINARY ASSESSMENT OF REHRIG INTERNATIONAL



COMMONWEALTH of VIRGINIA

DEPARTMENT OF WASTE MANAGEMENT 11th Floor, Monroe Building 101 N. 14th Street Richmond, VA 23219 (804) 225-2667

PRELIMINARY ASSESSMENT

OF

REHRIG INTERNATIONAL, INC. <u>VA-472</u>

VAD 089018977

Submitted By:

Commonwealth of Virginia

Department of Waste Management

August 2, 1989

Prepared By:

Kathleen I. Bartholomew

Environmental Program Analyst

Superfund Program

Department of Waste Management

Reviewed By:

Paul W. Kohler HRS Supervisor

Superfund Program

Department of Waste Management

Approved By:

J.D. moderno

Thomas D. Modena Pre-remedial Program Manager Superfund Program

Department of Waste Management

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6 0 001	JCIJISTON	6

1.0 INTRODUCTION

1.1 Site Location

Rehrig International, Inc. is located in Richmond, Virginia at 901 N. Lombardy Street. Approximate site coordinates are 77° 27' 15" W. longitude and 37° 33' 23" N. latitude (see figure 1, Richmond, Virginia, 7.5 minute topographic quadrangle, 1981).

1.2 Site History

Rehrig has been in business since 1980. They plate and assemble shopping carts and hand baskets and produce approximately one quarter of a million units annually. They have been operating as a RCRA interim status storage facility since 1981. The last RCRA inspection was conducted March 16, 1989. The RCRA permit is required due to the low level concentrations of nickel and chromium contained in the filter press cake stored on site. A closure plan has been submitted to the Department of Waste Management (DWM) for the drum storage area. Termination of the facility's interim status is expected to occur by September 1989. A Preliminary Assessment of the Rehrig facility was conducted on June 15, 1989 by DWM personnel.

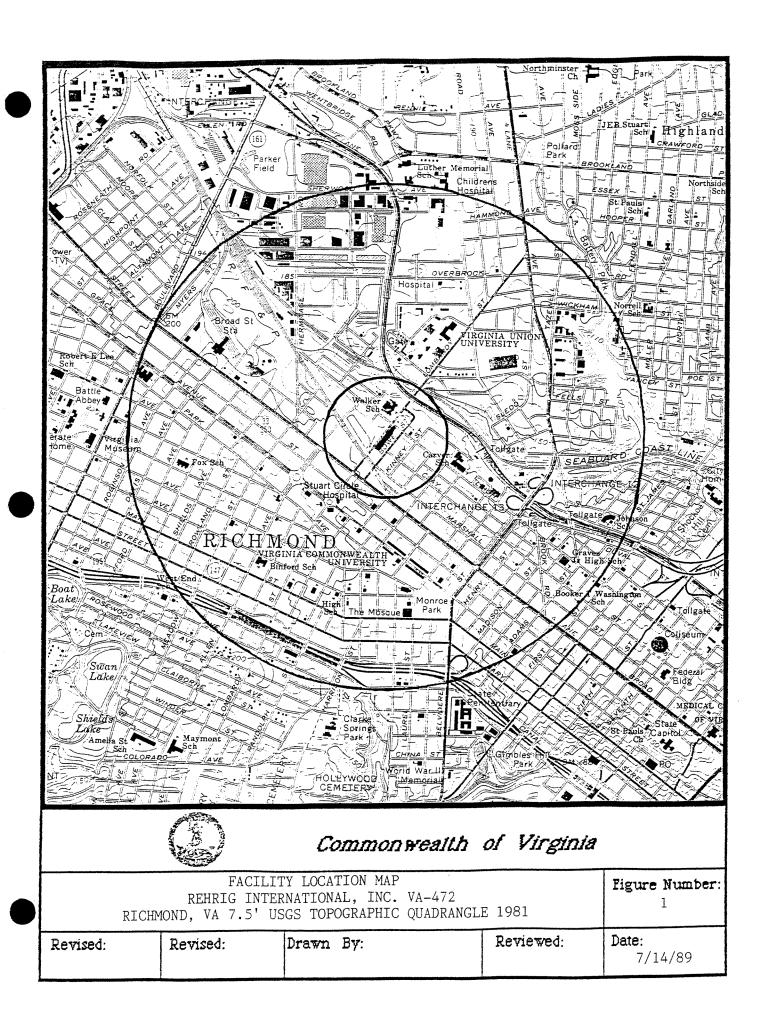
1.3 Site Layout

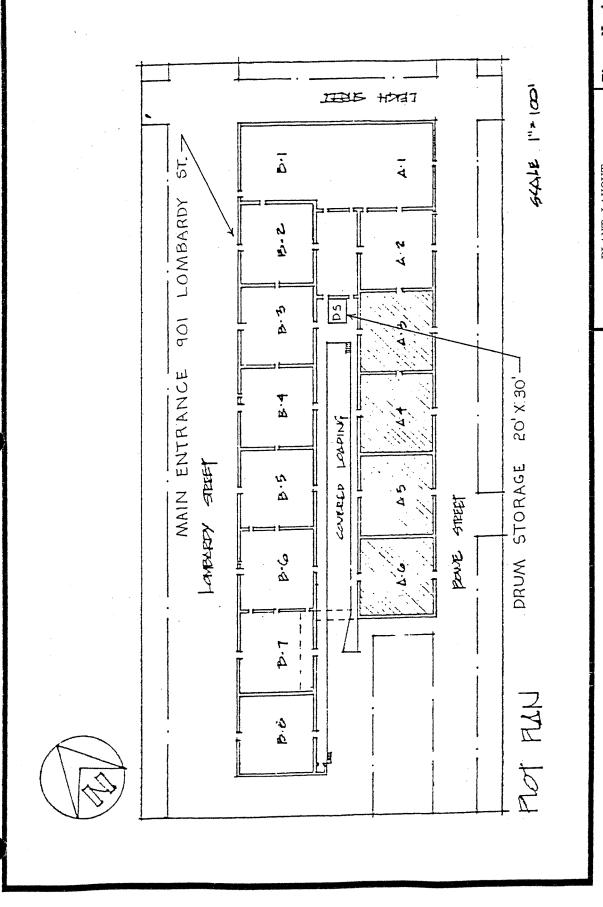
The Rehrig building is approximately 250,000 square feet. The upstairs houses the offices and on the ground level are the plating and assembly operations. Figure 2 shows the overall plant layout with drum storage area noted, and figure 3 is a detail of the plating operation.

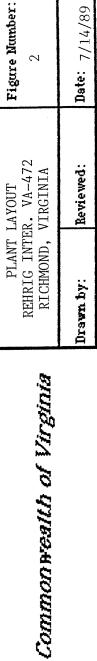
2.0 ENVIRONMENTAL SETTING

2.1 Population

A four mile radius of the site includes portions of Richmond City and Henrico County. The approximate population within a 1 mile radius is 2,870, within a 2 mile radius 11,478, within a 3 mile radius 25,826, and within a 4 mile radius 45,912. These approximate populations were determined using the following formula: population/mile 2 x x radius 2 where population/mile 2 is based on the 1980 census data for Richmond, Virginia.

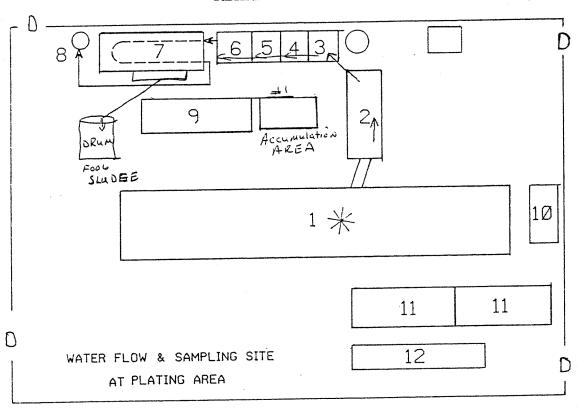








REHRIG INTERNATIONAL



- 1. NICKLE-TRICHROME plating process
- 2. Recieving tank for all water from No.1
 3. thru 7. Wastewater treatment process
 8. Discharge site to city & sampling
- site for city & lab
- 9. Trichrome emergency tank
- 10. Acid emergency tank
- 11. Nickle emergency tank
- 12. Cleaner emergency tank
- * No. 1 has retaining dike for emergency spillage or leaks
- D Doorways



Commonwealth of Virginia

	The second secon			, , , , , , , , , , , , , , , , , , ,
	Figure Number:			
Revised:	·	MOND, VIRGINIA Drawn By:	Reviewed:	Date: 7/14/89

2.2 Land Use

Land use surrounding Rehrig is a combination of residential, commercial/industrial, and community services. Directly north of the site, within a one mile radius, are two schools, two hospitals and I-95. East of Rehrig, within a one mile radius, is a school, I-95, a residential/commercial area, and Seaboard Coast Line RR. South of Rehrig, within a one mile radius, is a hospital, Virginia Commonwealth University, a school, and a residential/commercial area. West of the site, within a one mile radius, is a residential/commercial area, a school, and a museum.

2.3 Climate and Topography

The Rehrig site is at an approximate elevation of 180 feet (MSL). The topography is generally flat. Average annual rainfall, as recorded by NOAA (1980) at the Richmond WSO AP station, is 3.84 inches (9.75 cm) and the average temperature is 58.4°F (14.7°C).

2.4 Geology

The Rehrig facility is located in the Fall Zone between the Piedmont and Coastal Plain Physiographic Providences. This is a transitional zone up to 10 miles wide where the thin, younger Coastal Plain sediments begin to cover the older Piedmont rocks.

The basement rock for this area is the Petersburg granite. In the Fall Zone the Petersburg is overlain by Miocene marine transgressive sediments or younger Tertiary - Quaternary regressive sediments or both. Transgressive sediments are described as drabgray, bluish-gray, and greenish-gray silts, clays, and silty clays commonly well consolidated with some plant fragments and occasional shell beds. Regressive sediments are described as light- to bright-colored oxidized sediments, mainly sands and gravels with some clay (Daniels and Oruschak, 1974).

3.0 HYDROLOGY

3.1 Ground Water

Ground water quality within the Fall Zone is generally good except for some areas where high iron concentrations pose a problem. Pumping rates up to 10 gallons per minute (gpm) are common with rates of 100 gpm possible. Most wells in the Fall Zone are drilled through the thin Coastal Plain deposits and are completed in the underlying bedrock.

3.2 Surface Water

Surface water run-off from the facility goes into storm sewers that lead to the sewage treatment plant. The run-off from the site comes from water coming off the roof of the building and the surrounding sidewalk.

The James River is approximately 1.6 miles south of the facility. The river is used for recreational, industrial and municipal water supply purposes.

3.3 Water Supply

According to Meade Anderson of the State Water Control Board Piedmont Regional Office, the water supply, within a three mile radius of the site, is obtained from the city of Richmond. There is an intake pipe, for the city water supply, on the James River approximately 3 miles upstream and southwest of the site.

4.0 WASTE TYPES AND QUANTITIES

The solid wastes produced from Rehrig's operation are sludge from the nickel plating tank, filter press cake from the water treatment system, and metal chips from cleaning the metal parts holders that dip the metal pieces into the plating tanks.

The sludge from the nickel plating tank is produced when nickel precipitates out of solution and accumulates on the bottom of the tank. The accumulated sludge is cleaned out of the tank once a week. The quantity of sludge produced is approximately one quarter of a drum per week or one drum per month. The filter press is also cleaned weekly and fills from 1.5 to 2 drums each week. The metal parts holders are scraped when necessary and the metal chips are put into the drum with the filter cake solids and dried nickel plating sludge. Layers of absorbent material are also placed into each drum to ensure that no leakage occurs. Because of the facility's interim status, the drums are now removed only as necessary, however, after their interim status is terminated, they will be classified as a generator and can store the drums for only 90 days or less.

Extraction Procedure Toxicity (EP Toxicity) tests, for metals, are run on the waste stored in the drums once a year, as required in the waste characterization section of their RCRA permit. The average concentrations of chromium and nickel for the last three years has been 97 ppm and 1927 ppm respectively. All other EP Toxicity metals were at concentrations below regulatory limits.

In November of 1988, 86 drums were transported by Envirosafe Services of Ohio to Chem-Met Services in Wyandotte, MN. At the time of the last RCRA inspection in March 1989 there were 80 + drums on site. The facility is reported to generate approximately 4,800 pounds of this type of waste a month.

4.1 Solid Waste Management Units (SWMU's)

Four SWMU's have been identified for this site. They are as follows:

- SWMU No. 1: Nickel plating sludge drying drum
- SWMU No. 2: Filter press cake bin
- SWMU No. 3: 55 gallon storage drum with filter press cake, dried nickel plating sludge, metal chips from cleaning the metal holder, and absorbent material
 - SWMU No. 4: Drum storage area

4.1.1 SWMU No. 1

Nickel Plating Sludge Drying Drum

This drum is located next to the nickel plating tank. As the nickel drops out of the plating solution it accumulates on the bottom of the tank as a sludge. Once a week the sludge is removed and put into the drum to dry. Once it has dried, it is put into a 55 gallon drum.

4.1.2 SWMU No. 2

Filter Press Cake Bin

This SWMU is located underneath the filter press at the end of the waste water treatment process. It is a catch basin for the pressed filter cake that comes out of the filter press.

The waste water from the plating process goes through four stages of treatment. In the first stage, the pH of the waste water is adjusted with lime to between 8.5 and 10. In the second stage, a flocculent is added, in the third phase a coagulating agent is added, and in the fourth stage the treated wastewater goes to a settling tank. The treated waste water then goes through a filter press to remove all solids. After the treatment process is completed, the wastewater goes to the wastewater treatment plant (WWTP) through the city's sewer system.

When the filter press has reached capacity, it is emptied of all pressed filter cake. This is accomplished by scraping the filter cake off the filters. It falls into a catch basin directly underneath the press. It is then put into a 55 gallon drum, which is SWMU No. 3.

4.1.3 SWMU No. 3

55 Gallon Storage Drum

SWMU No. 3 is located near the filter press catch basin. It contains the dried nickel plating sludge, the filter press cake, and any metal chips that are scraped off the metal parts holders. Layers of an absorbant material are also put in this drum to ensure that it doesn't leak.

4.1.4 SWMU No. 4

Drum Storage Area

SWMU No. 4 is located near the loading dock (see figure 3). It is a concrete pad where full SWMU No. 3 drums are stored until they are picked up for transport to a TSD facility. The concrete pad is fenced in and is secured with a lock. At the time of the last RCRA inspection, March 16, 1989, there were approximately 80 drums in this area.

5.0 EXPOSURE ASSESSMENT

5.1 Ground water

Ground water contamination resulting from processes at Rehrig is not expected. All plating tanks have concrete containment systems. All processes are located inside the building and only run-off from the roof and sidewalk could potentially reach ground water by seepage. According to the State Water Control Board, there are no ground water wells within a three mile radius of the facility.

5.2 Surface water

Surface water contamination resulting from processes at Rehrig is not expected. All plating tanks have concrete containment systems. All processes are located inside the building and only run-off from the roof and sidewalk could potentially reach surface water. However, the facility is located in downtown Richmond which has a combination storm water/sewer drainage system so any runoff from the site is likely to be diverted to the waste water treatment plant before reaching any surface water. The James River is the closest surface water to the facility and it is approximately 1.6 miles south of the facility.

5.3 Direct contact

There is potential for direct contact with the drying nickel plating sludge and the filter press cake because they are in open containers.

5.4 Food chain

Food chain contamination resulting from processes at Rehrig is not expected. The building is completely enclosed and the drums are in a fenced, secured area, therefore, the potential for a release that would eventually end up in the food chain is not expected.

5.5 Air contact

There is no possibility of air contact with compounds used in the plating process because none are volatile.

6.0 CONCLUSION

This facility has been ranked as a "no further action" site. This is based on the fact that all systems associated with the chromium and nickel plating operation have sufficient containment surrounding them, and all drains located in the plating area lead to the facility's waste water treatment system and eventually to the city WWTP.

REFERENCES

- Geology of the Studley, Yellow Tavern, Richmond, and Seven Pines 7.5 minute Quadrangles, Virginia
- Daniels, P. A., Jr., and Onuschak, Emil, Jr., 1974, Geology of the Studley, Yellow Tavern, Richmond, and Seven Pines Quadrangles, Virginia: Virginia Division of Mineral Resources Rept. Inv. 38, 75 p.
 - Virginia Water Control Board: Ground Water Map of Virginia, 1985

APPENDIX A EPA PRELIMINARY ASSESSMENT FORM

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION							
O1 STATE	02 SITE NUMBER						
VA	472						

II. SITE NAME AND LOCATION	Ins	STREET, ROUTE NO., OR SPEC	DIFIC LOCATION IDENTIFIER	· ·		
O1 SITE NAME (Legal, common, or descriptive name of site)	02			·		
Rehrig International Corp.	0.4	901 North Lombs	ardy Street	07COUNTY 08 CONG		
O3 CITY	1 _	VA 23220		CODE DIST		
Richmond LONGIT			undranala IICCC			
09 COORDINATES LATITUDE LONGITURE 37° 33' 23'' N 77° 27'		Richmond, VA q	uadrangle, USGS <u>5 minute series</u>	1981		
10 DIRECTIONS TO SITE (Starting from nearest public road)		topographic 7.	J MITHULE SCITCE			
Heading west on Broad st., go ap	annovimatel	v 6 tenths of a	mile past S. R	. 301		
Heading west on Broad St., go at	pproximacer	y o cenend or a				
to Lombardy St. and take a right	L •			,		
III. RESPONSIBLE PARTIES	· ·	O OTOTT A	tud.			
01 OWNER (# known)	- 0	2 STREET (Business, mailing, residen	n. D. I. ASS			
Mr. C. N. Schumann		4 STATE 05 ZIP CODE	7737 Jahnke	koad		
03 CITY			()			
Richmond		VA 23225 8 STREET (Business, mailing, residen				
07 OPERATOR (If known and different from owner)						
Paul Bauz-Plating Manager	j.	901 N. Lombardy	12 TELEPHONE NUMBER	I		
09 CITY	110	001,7112				
Richmond		VA 23220	804 355-7864			
13 TYPE OF OWNERSHIP (Check one) Q A, PRIVATE B. FEDERAL:		C. STATE	□D.COUNTY □ E. MUI	NICIPAL		
	(Agency name)	G. UNKNOW	/N			
☐ F. OTHER:(Specify)						
14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply) 09, 05, 89	B UNICONTROLLE	D WASTE SITE (CERCLA 103 c)	DATE RECEIVED:/_	C. NONE		
MONTH DAY YEAR	B. UNCONTROLLE	D TENOT COLLEGENOUS 100 0)	MONTH DA	AY YEAR		
IV. CHARACTERIZATION OF POTENTIAL HAZARD						
01 ON SITE INSPECTION 06 . 15 . 89 A. EPA	A 🗆 B. EPA C		STATE D. OTHER	CONTRACTOR		
CXYES DATE $06/15/89$ \square A. EPA \square NO \square NO \square E. LOC	CAL HEALTH OFFICI	IAL F. OTHER:	(Specify)			
CONTRA	CTOR NAME(S):					
102 SITE STATUS (Check one)	03 YEARS OF OPERAT 1	10N 1980	☐ UNKNOW	Ni .		
XA, ACTIVE B. INACTIVE C. UNKNOWN SEGINNING YEAR ENDING YEAR						
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OF						
Trivalent chromium and nickel p	resent in f	filter cake and	dried sludge.			
TITYATCHE CHIOMEAN GHA MENGE		•				
OS DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OF Potential for nickel and chromi	um contamir	nation of surrou	unding environme	ent exits		
i fooil	ity proces	LELLING TOLAL	I A EUCTOPER MTC	1711 (7		
but is minimal due to the facility processes being totally enclosed within a building and the use of a four step treatment of waste water before it is discharged						
to the Richmond sewer system.						
V. PRIORITY ASSESSMENT						
01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 · Waste Information and Part 3 · Description of Hazardous Conditions and incidents)						
☐ A. HIGH ☐ B. MEDIUM (Inspection required promptly) (Inspection required)	C. LOW (Inspect on time av		ction needed, complete current dispos	ution form)		
VI. INFORMATION AVAILABLE FROM				03 TELEPHONE NUMBER		
	02 OF (Agency/Organizati			,		
Paul Kohler	Department	t of Waste Manag	gement	804 225-2860		
04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE		
K. S. Bartholomew	DWM	Superfund	804)225-2858	OGONTH DAS YEARS		

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 2 - WASTE INFORMATION

I. IDENTIFICATION							
01 STATE VA	02 SITE NUMBER 472						

☐ B. POWDER, FINES ☐ F. LIQUID ☐ TONS ☐ CUBIC YARDS ☐ CUB		waste quantities Grandent) Grandent Gra		ACTIVE L. G. FLAMMABLE		E TIBLE	
D. OTHER	(Specify)	NO. OF DRUMS	80+				
II. WASTE T	YPE				OO COMMÉNTS		
CATEGORY	SUBSTANCE N	IAME		02 UNIT OF MEASURE	Niekol pl	ating sludge	
SLU	SLUDGE		Approx 550	gallons	The approxi	mate number	of gallon
OLW	OILY WASTE				was obtaine	ed by estimat	ing that
SOL	SOLVENTS					every eight	
PSD	PESTICIDES				one out or	every ergm. ing sludge.	therefore
occ	OTHER ORGANIC C	HEMICALS	-	•		eighty drums	
IOC	INORGANIC CHEMIC	CALS				ing sludge.	<u> </u>
ACD	ACIDS				HICKCI PIG.	21116 2144801	
BAS	BASES						
MES	HEAVY METALS						
IV. HAZARD	OUS SUBSTANCES (See	Appendix for most freque	ntly cited CAS Numbers)	04 STORAGE/DIS	DOSAL METHOD	05 CONCENTRATION	06 MEASURE OF
1 CATEGORY	T		03 CAS NUMBER				
MES	nickel		7440-02-0	55 gall	on arum		
MES	chromi	um	7440-70-2	55 gall	on drum		
							-
							<u> </u>
							+
	•						
V. FEEDST	OCKS (See Appendix for CAS Nu	mbers)		CATEGORY	01 FEEDS	TOCK NAME	02 CAS NUMBE
CATEGOR	RY 01 FEEDST	OCK NAME	02 CAS NUMBER				
FDS				FDS			
FDS				FDS			
FDS				FDS			
FDS				FDS			1
	ES OF INFORMATION	Cité specific references, i	e.g., state liles, sample analys	is, reports)			
DWM RI	CRA files aul Bauz, Plata						

POTENTIAL HAZARDOUS WASTE SITE

I. IDENTIFICATION			
OLSTATE	02 SITE NUMBER		

PRELIMINARY ASSESSMENT
CRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

	AZARDOUS CONDITIONS AND INCIDE	•	
. HAZARDOUS CONDITIONS AND INCIDENTS			T ALLEGED
01 ☐ A. GROUNDWATER CONTAMINATION	02 C OBSERVED (DATE:) 04 NARRATIVE DESCRIPTION	_ 1] ALLEGED
None expected or observed. All p All processes are located inside and sidewalk could potentially r	lating tanks have concrete the building and only ru	J-OTT TIOM CHE I	stems. oof
	02 C OBSERVED (DATE:) DOTENTIAL	ALLEGED
O1 C B SURFACE WATER CONTAMINATION O3 POPULATION POTENTIALLY AFFECTED: None expected or observed. All p All processes are located inside and sidewalk could potentially r	. 04 NARRATIVE DESCRIPTION Plating tanks have concrete the building and only ru	e containment sy n-off from the r	001
01 C. CONTAMINATION OF AIR 03 POPULATION POTENTIALLY AFFECTED:	02 C OBSERVED (DATE:	•	□ ALLEGED
None expected or observed. Compoun	ds used in plating proces	s do not volital	ize.
	02 C OBSERVED (DATE:) ☐ POTENTIAL	☐ ALLEGED
01 D. FIRE/EXPLOSIVE CONDITIONS 03 POPULATION POTENTIALLY AFFECTED:	02 U OBSERVED (OATE:		
None expected or observed. Compoun	nds used in process are n	ot flammable or	ignitable
01 ☐ E. DIRECT CONTACT 03 POPULATION POTENTIALLY AFFECTED:	02 © OBSERVED (DATE:	press cake are	□ ALLEGED
Drums containing drying nickel pand therefore there is potential	l for direct contact.	press same are	r
01 ☐ F. CONTAMINATION OF SOIL 03 AREA POTENTIALLY AFFECTED: (ACCENT	02 ☐ OBSERVED (DATE:		☐ ALLEGED
None expected or observed. The w	waste is inside the buildi	ng in a fenced,	secured
area. There is no on site dispos	297.	V.	
01 © G. DRINKING WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED:	02 C OBSERVED (DATE:	_) G POTENTIAL	☐ ALLEGED
cite is from the Richmond Munici	king water for the 3 mile ipal water supply. The int miles upstream of the sit	ie.	rr-J
site is from the Richmond municists located on the James River 3	miles upstream of the sit	POTENTIAL	☐ ALLEGED
site is from the Richmond municists located on the James River 3	miles upstream of the sit 02 OBSERVED (DATE: 04 NARRATIVE DESCRIPTION kel plating sludge and the	e filter press c	☐ ALLEGED
site is from the Richmond munical is located on the James River 3 10 H. WORKER EXPOSURE/INJURY 03 WORKERS POTENTIALLY AFFECTED: Drums containing the drying nick open and therefore there is potentially affects there is potentially affects.	miles upstream of the sit 02 © OBSERVED (DATE: 04 NARRATIVE DESCRIPTION kel plating sludge and the ential for worker exposure	e filter press c	☐ ALLEGED
site is from the Richmond munical is located on the James River 3 O1 OH. WORKER EXPOSURE/INJURY O3 WORKERS POTENTIALLY AFFECTED: Drums containing the drying nick	miles upstream of the sit 02 OBSERVED (DATE: 04 NARRATIVE DESCRIPTION kel plating sludge and the ential for worker exposure 02 OBSERVED (DATE: 04 NARRATIVE DESCRIPTION	e filter press c	ake are

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

VA 472

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)
01 J. DAMAGE TO FLORA 04 NARRATIVE DESCRIPTION
None expected or observed. All processes are located inside the building. Drums are
transported directly to a licensed TSD facility.
01 K. DAMAGE TO FAUNA 04 NARRATIVE DESCRIPTION (Include name(s) of species)
None expected or observed. All processes are located inside the building. Drums are
transported directly to a licensed TSD facility.
D DOSENICE (DATE:) POTENTIAL ALLEGED
01 L CONTAMINATION OF FOOD GRAIN
None expected or observed. All processes are located inside the building. Drums are
in a fenced, secured area. Potential for a release that would end up in the food chain
is not to be expected
01 DM. UNSTABLE CONTAINMENT OF WASTES 02 DBSERVED (DATE:) DOTENTIAL DALLEGED
(Spillarumoil/standing liquids/leaking drums) 03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION
Potential for spillage of contents of open drums, however, any liquid would go to a
drain loading directly to the waste water treatment system and any solids would be
drain leading directly to the waste water treatment system and any solids would be swept up and put back into the drum. O2 OBSERVED (DATE:) DESCRIPTION OF ALLEGED
01 \(\text{N. DAMAGE TO OFFSITE PROPERTY} \) 04 NARRATIVE DESCRIPTION
None expected or observed. All processes are located inside the building. Drums are
in a fenced, secured area and are transported to a licensed TSD facility.
DOTESTICATE DE POTENTIAL ALLEGED
01 □ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02 □ OBSERVED (DATE:
None expected or observed. All drains that could possibly come in contact with any
waste are routed through the waste water treatment system first.
□ POTENTIAL □ ALLEGED
01 LI P. ILLEGADUNAU MONIZED SUM INC. 04 NARRATIVE DESCRIPTION
None expected or observed. Drums are manifested during transport and are taken to
a licensed TSD facility.
05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
Rehrig has had numerous RCRA violations which pertained to some sort of documentation.
None of them relate to a release of any kind.
III. TOTAL POPULATION POTENTIALLY AFFECTED: _2,870 within one mile
IV. COMMENTS
V. SOURCES OF INFORMATION (Cite specific references, e.g., state lifes, sample analysis, reports)
Paul Bauz-Plant
PCPA files

Glenn Moore, DWM RCRA

FIELD TRIP SUMMARY REPORT

This summary should be prepared in conjunction with the Preliminary Assessment, EPA Form 2070-12.

EPA Case Number VA - 472 Site Name Rehrig International, Inc

Site Description

Rehrig International, Inc. Plates metal parts and makes the plastic components for shopping carts and hand baskets. They are a RCRA regulated facility operating under interim status. They store filter press cake, dried sludge and metal chips, from their process, in drums. The drums are periodically removed to a regulated treatment, storage, and disposal (TSD) facility.

Area of site (acres)

Hazardous portion, if not entire site

Drum Storage area

Approximately 6

Description of processes/operations which took place at the site Plating and assembly of shopping carts and hand baskets. Waste water from the plating process is treated in four stages, filtered and sent to the Richmond waste water treatment plant (WWTP).

Waste handling/disposal practices

There are four Solid Waste Management Units (SWMU's) on site. The nickel plating sludge drying drum, the filter press cake bin, the 55 gallon drum where the dried nickel plating sludge, the filter cake and the metal chips are consolidated, and the drum storage area. The drums are periodically transported to TSD facility.

Site topography and runoff drainage pathways

Site is flat. Processing areas are located inside the building; therefore, there are no drainage pathways except piping inside the building. All piping goes to WWTP.

Surface or subsurface drainage areas (leachate) noted? All facility drainage goes to the WWTP via sewer system. All surface runoff from roof and sidewalk goes to the WWTP via sewer system.

Odors/stains noted? None Stressed vegetation noted?

None

Location and description of streams or receiving waters adjacent to site. Include flow direction and observations. Note location on attached map.

The James River is located approximately 1.6 miles south of the facility and flows east for approximately 2 miles and then turns and flows south. Contamination of the river from any spillage at the facility is not expected.

Monitoring wells on site or in vicinity. Note location on attached map.

There are no monitoring wells on site or within a three mile radius of the site.

	Population within 1 mile of site:
Population within % mile of site:	□ 0-10
0-10	□ 10–100
☐ 10-100 ☐ greater than 100	☐ 100÷1000
M Steafer than 100	greater than 1000
Surrounding land use (woodlot, agricultura	l, recreation, industrial, etc.)
NORTH Industrial, residential/commercial, recreational, and community services	EAST Industrial, residential/commercial, recreational, and community services
SOUTH Industrial, residential/commercial	WEST Industrial, residential/commercial recreational, and community services
recreational, and community services	ns (note use of surface water and/or wells)
The water supply within a 3 mile radius is an intake pipe for the city water sup approximately 3 miles upstream and southw	ply on the James River. It is located est of the facility.
Reference: Meade Anderson - State Water C	Control Board, Piedmont Regional Office.
Domestic wells. Approximate number within List nearest wells below and show location	n k mile: 0
Owner/Resident Ad	dress
Groundwater flow direction, if known	•
Suspected to flow south towards the Jan	mes River.
Description of odor/taste problems	
None	-
·	-
State inspection activity (including per The plant is operating under a RCRA in inspection was conducted March 16, 198	terim status permet
State/Federal/Private remedial activities	25
None	
1	

111110001	commentsFu	irther	description	οf	site

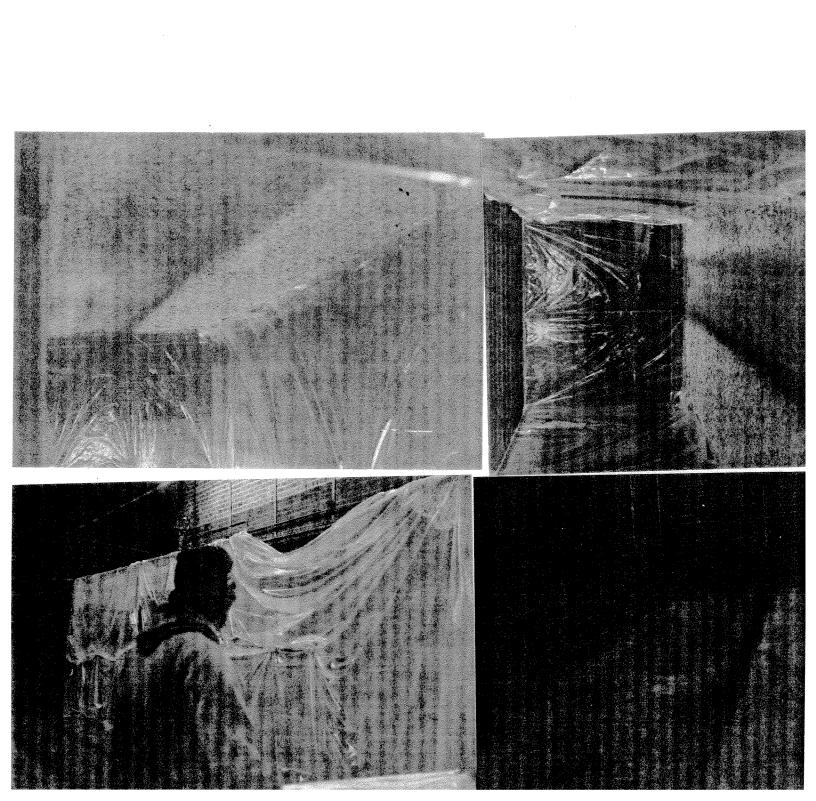
A closure plan has been submitted to the VA. DWM. The facility plans to close by September, 1989 at which time their interim status will be terminated. Once their interim status is terminated they will be classified as a generator and will be allowed to store the drums on site for only 90 days or less.

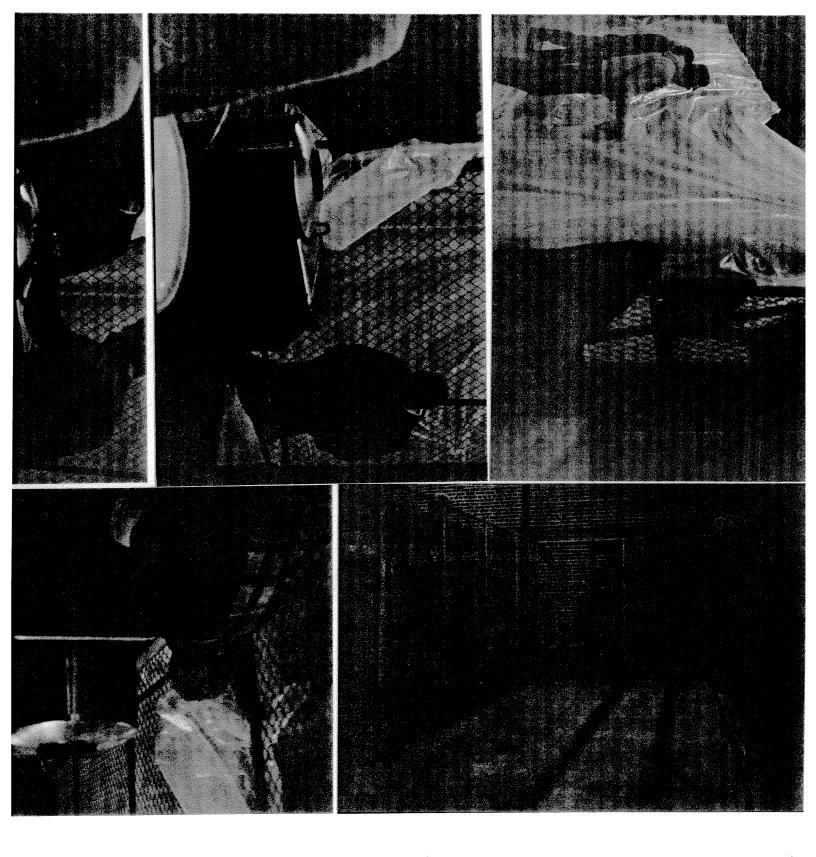
SITE CONTACTS			
Name and Title	Affiliation	Phone	
Paul Bauz	Plant Manager	(804) 355–7864	
, ·			

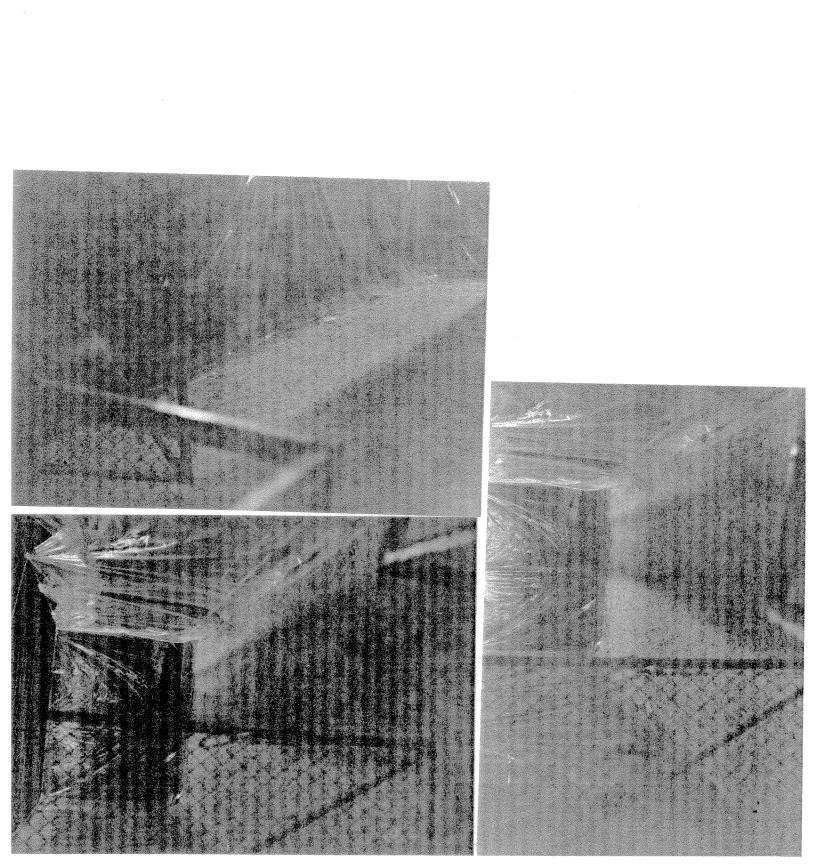
INSPECTION INFORMATION K. I. Bartholomew, Glenn Moore, and Russell Dudley						
Name and title of inspector(s)						
Agency VA. Dept. of Waste Management	Phone number <u>225-2858</u>					
	m: 0000					
Date	Time on site0900					
Weather conditions:	·					
Sunny, clear 85°F						

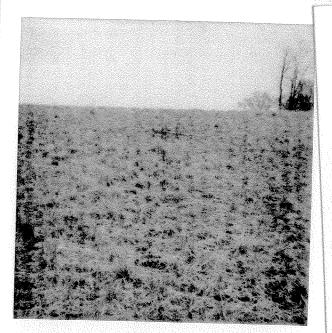
ATTACHMENTS

- o Topographic map identifying site location. Include name of quadrangle map:
- o Site sketch map showing location of monitoring wells, domestic wells, municipal water supplies, and areas of concern (lagoons, leachate seeps, drums, etc.)
- o Any available sampling results or state monitoring data with map showing sample locations.





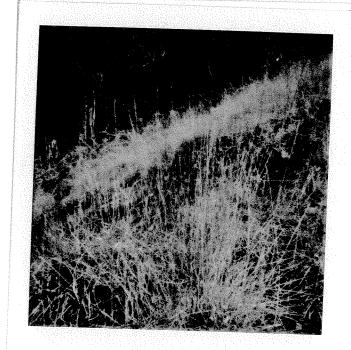




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Heater Works BRIFFIN PIPE mad. HTS 3/3/188



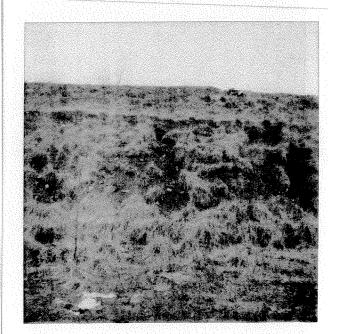
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COMMONWEALTH of VIRGINIA

DEPARTMENT OF WASTE MANAGEMENT 11th Floor, Monroe Building 101 N. 14th Street Richmond, VA 23219 (804) 225-2667

Mr. Paul Bauz Rehrig International, Inc. 901 N. Lombardy Street Richmond, Virginia 23220

Dear Mr. Bauz:

Enclosed you will find a copy of the report that was issued to the EPA based upon the Department of Waste Management's visit to the Rehrig International, Inc. facility on June 15, 1989.

If you have any questions call me at (804) 225-2906.

Sincerely, Hathley S. Bartholomen

Kathleen I. Bartholomew

Environmental Program Analyst

cc: Glenn Moore

OCTOBER 19, 1990

LETTER FROM REHRIG INTERNATIONAL TO VIRGINIA DEPARTMENT OF WASTE MANAGEMENT

Connanda Maria Mar

October 19, 1990

Commonwealth of Virginia
Department of Waste Management
11th Floor Monroe Building
101 N. 14th Street
Richmond, Virginia 23219

Attn: Ms. Cynthia Bailey

Executive Director

Re: Closure Plan

VAD089028377

Dear Ms. Bailey:

Enclosed for your use are Certification Statements and support documentation indicating clean closure of our containment slab has been achieved. The decontamination, removal, and sampling activities were supervised by Hatcher-Sayre, Inc.

If you have any questions regarding the enclosed documentation, please feel free to contact me.

Sincerely

REHRIG INTERNATIONAL

Paul Bauz

Plating and Waste Manager

cc: Mr. Glenn Moore, Chemist

I hereby certify based upon the information provided by Hatcher-Sayres, Inc. that the containment pad for Rehrig International has been closed in accordance with the specifications contained in the approved closure plan.

Paul Bauz

Plating and Waste Manager

I hereby certify that the containment pad for Rehrig International has been closed in accordance with the specifications contained in the approved closure plan. The decontamination, removal and sampling activities were supervised by Hatcher-Sayre, Inc.

William C. Kreye, Ph.D., P.E. Vice President, Engineering

P.E. Registration No. 7434

APPENDIX IV - COCHRAN'S APPROXIMATION TO THE BEHRENS-FISHER STUDENT'S T-TEST(1)

$$\overline{X} = \underbrace{X_1 + X_2 t \dots X_N}_{n}$$

$$S^2 = \underbrace{(X_1 - \overline{X})^2 + (X_2 - \overline{X})^2 t \dots + (X_n - \overline{X})^2}_{n-1}$$

$$t-statistic \ t^* = \underbrace{\overline{X} m - X_B}_{\sqrt{S} m^2 + \overline{S} b^2}$$

$$\underline{\sum m^2 + \overline{S} b^2}_{nm}$$

$$WB = \underbrace{Sb^2}_{nb} \text{ and } Wm = \underbrace{Sm^2}_{nm}$$

Comparison t-statistic tc = Wbtb + Wmtm

If $t* \geq tc$, conclude there has been a significant increase. If t* < tc, conclude there has not been a change in the specific parameter.

(1) Reference: 40CFR - Part 264

The Certificate of Analyses presenting analytical test results for rinsate samples (background and monitoring) collected from the containment pdd at Rehrig International is provided in Attachment I. Samples numbered 2861, 2862, 2863, and 2864 represent background samples. Samples numbered 2857, 2858, 2859, and 2860 are monitoring samples. All analyses were performed using SW-846 procedures.

1)	TOX:	Background, mg/l	Monitoring, mg/l
and the second s		277 291 281 334	192 197 205 209
All the same and t		$\bar{X}_{B} = 295.75$ $S^{2}_{B} = 684.92$	$\overline{X}m = 200.75$ $S^2m = 58.92$
		t* = -6.97	

Since t-statistic is negative, there is no significant difference between the monitoring data and background data.

2) Total Cyanide: None Detected

3) Free Cyanide: None Detected

4)	Arsenic:	Background, mg/l	Monitoring, mg/l
A MARTIN DEPOS TO A NAVINO CONTRACTOR OF THE CON		0.001 0.001 0.006 0.001	0.004 0.003 0.002 0.007
Action to the control of the control		$\bar{X}_{B} = 0.00225$ $S_{B}^{2} = 6.2 \times 10^{-6}$	$\bar{X}m = 0.004$ $S^2m = 4.6 \times 10^{-6}$
or property of the second control of the		t* = 1.065	
man company - w to discover to the		$W_{B} = 1.55 \times 10^{-6}$	$Wm = 1.1x10^{-6}$
		tc = 2.353	

Since t*<tc, no significant increase.

5)	Barium:	Background, mg/l	Monitoring, mg/1
		0.34 0.42 0.23 0.36	0.24 0.18 0.21 0.35
de 17 kat is statut ja statut ja		$\overline{X}_{B} = 0.3375$ $S_{B}^{2} = 0.0063$	$\bar{X}m = 0.245$ $S^2m = 0.0055$
To all the same of		t* = -1.7	

Since t-statistic is negative, there is no significant difference between the monitoring data and background data.

6)	Cadmium:	Background, mg/l	Monitoring, mg/l
		0.0002 0.0002 0.0007 0.0002	0.0002 0.0004 0.0005 0.0005
Principals independent management (A) (A) of		$X_B = 3.25 \times 10^{-4}$ $S_B^2 = 6.25 \times 10^{-8}$	$\overline{X}m = 4.0 \times 10^{-4}$ $S^2m = 2.0 \times 10^{-8}$
		t* = 0.522	
		$W_B = 1.5625 \times 10^{-8}$	$Wm = 5.0 \times 10^{-9}$
	4.	tc = 2.353	

Since t*<tc, no significant increase.

- 7) <u>Hexavalent Chromium:</u> None Detected
- 8) <u>Trivalent Chromium:</u> None Detected

9)	<u>Lead:</u>	Background, mg/l	Monitoring, mg/l
The state of the s		0.003 0.002 0.015 0.005	0.006 0.013 0.014 0.013
		$\overline{X}_{B} = 6.25 \times 10^{-3}$ $S_{B}^{2} = 3.55 \times 10^{-5}$	$\overline{Xm} = 1.15 \times 10^{-2}$ $S^2m = 1.36 \times 10^{-5}$
And the second s		t* = 1.498	
The state of the s		$W_B = 8.8 \times 10^{-6}$	$Wm = 3.4 \times 10^{-5}$
TOTAL STREET, ST.		tc = 2.353	•

Since t*<tc, no significant increase.

- 10) <u>Selenium:</u> None Detected
- 11) Silver: None Detected

12)	Nickel:	Background, mg/l	Monitoring, mg/I
a dalam mana ama mana dan dan dan dan dan dan dan dan dan		0.006 0.006 0.014 0.002	0.006 0.018 0.009 0.010
Common Company and Common Comm		$\overline{X}_{B} = 0.007$ $S_{B}^{2} = 2.53 \times 10^{-5}$	$\overline{X}m = 0.01075$ $S^2m = 2.62x10^{-5}$
		t* = 1.045	
and the second s		$W_{B} = 6.3 \times 10^{-6}$	$Wm = 6.5 \times 10^{-6}$
a particular and a second		tc = 2.352	

Since t*<tc, no significant increase.

ATTACHMENT 1 CERTIFICATE OF ANALYSIS

COMMONWEALTH LABORATORYEP 1 2 1990

INCORPORATED

CHEMISTS BUILDING, 2209 EAST BROAD STREET RICHMOND, VIRGINIA 23223

P.O. BOX :8025

AREN CODE 804

TELEPHONE: 648-8358

FAX 644-5820

FOUNDED 1959

CERTIFICATE OF ANALYSIS FOR:

Mr. Terry Blankenship Hatcher-Sayre, Inc. 905 Southlake Boulevard Richmond, Virginia 23236 DATE: September 12, 1990

SAMPLE NUMBER: 90-50-4132

SAMPLE RECEIVED: August 30, 1990

Nine (9) samples

IDENTIFIED AS: Rehrig Pad Closure

North Lombardy Street

Project Number 178-002

METHOD OF ANALYSIS: EPA

ANALYTICAL RESULTS: -		UNIT OF MEASUREMENT: mg/l, unless otherwise noted				
			2859	2860	2861	
Analyzed For:	2857	2858	2039	2860	2001	٠.
TOX, ug/l	192	197	205	209	277	
Total Cyanide, LOD = 0.02	ND	ND	ND	ИD	ND	
Free Cyanide, LOD = 0.02	ИD	ND	ND	ND	ND	
Arsenic, LOD = 0.001 Barium	0.004 0.24	0.003 0.18	0.002 0.21	0.007 0.35	ND 0.34	
Cadmium, Furnace LOD = 0.0002 Hexavalent	ND	0.0004	0.0005	0.0005	ND	. •,
Chromium, LOD = .01 Trivalent	ND	ND	ND	ND	ND	
Chromium, LOD = .01 Lead, Furnace	ND 0.006	ND 0.013	ND 0.014	ND 0.013	ND 0.003	•
Selenium, LOD = 0.001	ND	ND	ND	ND	ND	
Silver, Furnace, LOD = 0.001 Nickel, Furnace	ND 0.006	ND 0.018	ND 0.009	ND 0.010	ND 0.006	•

COMMONWEALTH LABORATORY INCORPORATED

90-50-4132 Page 2

	2862	. 2863	2864
TOX, ug/l Total Cyanide,	291	281	334
LOD = 0.02 Free Cyanide,	ND	ND	ND
LOD = 0.02 Arsenic,	ND	ND	ND
LOD = 0.001 Barium Cadmium, Furnace,	ND 0.42	0.006 0.23	ND 0.36
LOD = 0.0002 Hexavalent Chromium,	ND	0.0007	ND
LOD = .01 Trivalent Chromium,	ND :	ND	ND
LOD = .01 Lead, Furnace Selenium, LOD = 0.001 Silver, Furnace,	ND 0.002 ND	ND 0.015 ND	ND 0.005 ND
LOD = 0.0002 Nickel, Furnace	ND 0.006	ND 0.014	ND 0.002

Respectfully submitted,

for Edwin Cox III President

ECIII:cpk

Analytical Methods EFA SW-846

TOX	902 0
CN	9010
Arsenic	9060
Barium	7080
Cadmium	7131
Chromium VI	.7195
Lead	7421
Selenium ,	7740
Silver	7761
Nickel	7521

NOVEMBER 6, 1990

LETTER FROM VIRGINIA DEPARTMENT OF WASTE MANAGEMENT TO REHRIG INTERNATIONAL



COMMONWEALTH of VIRGINIA

DEPARTMENT OF WASTE MANAGEMENT 11th Floor, Monroe Building 101 N. 14th Street Richmond, VA 23219 (804) 225-2667 TDD (804) 371-8737

NOV 0 6 1990

Paul Bauz, Plating and Waste Manager Rehrig International 901 North Lombardy Street Richmond, Virginia 23220

Re: EPA ID # VAD089028377, Closure of the Rehrig International Facility

Dear Mr. Bauz:

On November 1, 1990, the facility was visited by Glenn More, Chemist, representative from the Department of Waste Management. The inspection and the required certifications show that hazardous waste closure has been performed in accordance with the approved closure plan. Therefore, in accordance with Section 9.7.C.8 of the Virginia Hazardous Waste Management Regulations, you are hereby notified that financial assurance for closure of the facility is no longer required. Please note, however, that the Environmental Protection Agency retains the authority to address possible corrective action of continuing releases pursuant to the Hazardous and Solid Waste Amendments of 1984.

If there are any questions, please feel free to call me at (804) 225-3754.

Very truly yours,

Glenn Moore, Chemist

Division of Technical Services

NOVEMBER 9, 1990

RCRA INSPECTION



COMMONWEALTH of VIRGINIA

DEPARTMENT OF WASTE MANAGEMENT 11th Floor, Monroe Building 101 N. 14th Street Richmond, VA 23219 (804) 225-2667 TDD (804) 371-8737

NOV 0 9 1990

Certified-Return Receipt Requested

Paul Bauz, Plating Manager Rehrig International 901 N. Lombardy Street Richmond, Virginia 23220

Re: VAD089028377, Compliance Inspection

Dear Mr. Bauz:

facility was visited by a representative of the Department on October 15, 1990 in order to conduct a Hazardous Waste Management Compliance Inspection. During the inspection, checklists were completed (copies enclosed) to document compliance with the Virginia Hazardous Waste Management Regulations (VHWMR). It was noted that your facility appeared to be in compliance with the VHWMR.

If there are any questions, please feel free to call me at (804) 225-3754.

Very truly yours,

Glenn Moore, Chemist

Division of Technical Services

Enclosures

SURVEY SHEET FOR INSPECTION OF HAZARDOUS WASTE FACILITIES

EHKIG	LNIERNAI	10 N AW	
1 N. LO	MBARDY	STREET	``
CHMON	D, /A. 23	220	
089028	377		
ve: <u>Pauh</u>	BAUZ		,
LAT, NG	MAN	AGER	
141 <u>355</u>	1864		
FLENN	MOORE		•
HEMIS	5 T		<u>.</u>
11	1190		-
			-
~caralina	ATC. I		
- 3 1 4-6-0	f- 1 3~m		
		•	
est monthly te of each mount Gene	y total) and type of wast rated	e generated. Amount Accumul	lated
	CHMON CHMON O89028 Ve: Paul LATING LATING OFFENIS OFFENIS OFFENIS Cription offed by the CHROMA CHROMA Sof hazard te of each mount Gene	CHMOND, VA, Z3 089028377 ve: Paul BAUZ LATING MAN 04) 355-7864 CHEMIST IIII 90 mess activity of the firecycling, etc.) SIHOPPING CARTS cription of the waste sted by the firm CILROME PLATIN s of hazardous waste gent monthly total) and	THE MIST CHEMIST CHEMIST CHEMIST CHEMIST CHOPING CARTS CHROME PLATING SLUNG Sof hazardous waste generated on a mest monthly total) and the greatest te of each type of waste generated. mount Generated MANAGER MANAGER (i.e., fur of the waste stream(s) and haze the firm. CHROME PLATING SLUNG and the greatest the of each type of waste generated.

4.	Does the facility ever generate greater than: 1 kg. of acutely toxic waste (P listed waste or F020-F023 and F026-F027)?	YES	МО)
•	100 kg of clean-up from a spill of P listed waste or F020-F023 and F026-F027 waste?	YES	ЙÒ
If y	ves, then the facility is a generator.		
5. _ Eル	How is the waste presently being handled? Where is CHEM-ME?	it SEM	sent? EUICES 1.4819Z
oHi	D045247905 MID0969	631	9 Y
6.	Does the facility generate any hazardous waste is excluded from regulation? If yes, list the te and the basis for exclusion.	'ES (- -	NŌ
		_	
		-	
that	Does the facility generate any hazardous waste t is burned for energy recovery (hazardous waste 1)? If yes, list the waste, where it is sent, and aplete the Recyclable Materials Chaplete		NO)
is inc haz haz	Does the facility generate any used oil that burned for energy recovery (used oil fuel), luding used oil that is also a characteristic ardous waste, or used oil that is mixed with ardous waste generated by a conditionally exempt all Quantity Generator? If yes, list the waste, where is sent, and complete the Recyclable Materials Check	YES list	NO

- YES (NO) Does the facility generate any hazardous waste that is reclaimed to recover economically feasible amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these? If yes, list the waste, where it is sent, and complete the Recyclable Materials
- Does the facility generate, transport or collect YES (NO spent lead-acid batteries? If yes, complete the Recyclable Materials Checklist.
- Based on the above, the facility is a:
 - conditionally exempt small quantity generator
 - small quantity generator
 - generator
 - d permitted or interim status TSD
 - unpermitted TSD (explain in comments section)

[Circle One]

Check accumulation times and quantities for the three types of generators. If the times or quantities are exceeded, then the facility is moved up to the next category. Complete the appropriate checklist(s).

A conditionally exempt small quantity generator can accumulate indefinitely, but if the amount accumulated ever exceeds 1000 kgs. then he becomes a small quantity generator. At the time the 1000 kg. limit is passed, the accumulation times for small quantity generators begins.

Small quantity generators can accumulate up to 180 days or 270 days if the disposal site is over 200 miles away. However, if at any time over 6000 kgs. of waste is accumulated, then the small quantity generator becomes a generator.

List each container and tank accumulation area. Specify the number and capacity of each tank. [Note: Include any satellite accumulation areas. Verify that only 55 gallons of any particular hazardous waste code (or one quart of acutely toxic waste) is at that site.]

Location	Number of Containers	Number of Tanks	Capacity
#1 #Z	1. ssgal DRum		5596ls 55996
14. Com	nents	-	

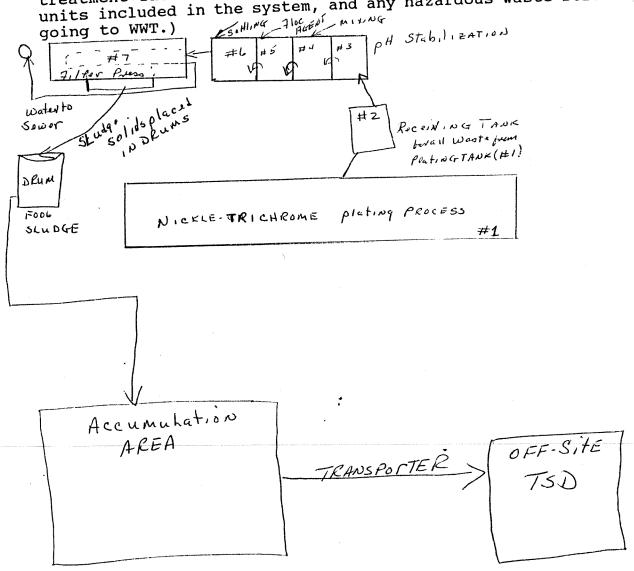
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15. Waste Management Flow Diagram

(On this page sketch a brief, but detailed, flow diagram that includes where the waste is generated, the steps through a treatment system (if any), the steps through storage including satellite accumulation areas. Do this for each waste stream including excluded hazardous waste. Include any wastewater treatment facilities at the company, and verify the type of units included in the system, and any hazardous waste streams



APRIL 1990

INSPECTION CHECKLIST FOR THE USE AND MANAGEMENT OF CONTAINERS

Name of F	acility: REARIG INTERNATION	OAN
Address:_	901N. LOMBARDY STA	BEET :
	RICHMOND, VA. 2322	
	mber: VAD 089028377	
Facility Inspection Representative: Paul BAu		15
Title:	(1)	ANAGER
	Number: (804) 355-7864 's Name: GLENN MOORE	
	CHEMIST	
	nspection:	
Va. Hazardous Waste Reg. 9.8.B.	 Are all containers holding hazardous waste in good condition, i.e., not showing signs of leakage or corrosion or any other 	YES NO
	deterioration/deformation? If no, list the storage/accumulation areas where there are problems and the type of problem: Location Problem	- -
9.8.C.	2. Are the containers lined or made of materials compatible with hazardous waste placed into them so that the container will not react with, or otherwise be incompatible with, the hazardous wastes stored?	YES NO

6.4.E.b	3. Is the date upon which each period of accumulation begins clearly marked and visible for inspection on each container?	YES NO
6.4.E.C.	4. Is the container labeled or marked clearly with the words "Hazardous Waste"?	YES) NO
9.8.D.1.	5. Are all containers holding hazardous waste kept closed during storage except as necessary to add or remove waste?	(YES) NO
	If <u>no</u> , list the locations where open containers are found.	
9.8.E.	6. Are areas where hazardous waste containers are stored inspected by the owner/operator at least weekly?	YES NO
9.1.F.2.a. 9.1.F.4. 6.4.E.1.d.	7. For large quantity generators and TSD facilities only: Is an inspection log maintained?	YES NO
9.8.F.	8. Are containers holding ignitable or reactive waste located at least 50 ft. from the facility's property line?	YES NO
9.8.G.1.	9. Are incompatible wastes placed in separate containers?	YES NO
9.8.G.3.	10. Are storage containers holding hazardous wastes which are incompatible with any materials or other hazardous wastes stored nearby separated from the other materials or protected from them by means of dikes, berms, walls, or other devices?	YES NO

6.4.E.3.a.	11. For satellite accumulation areas:	
	a. Are there more than 55 gallons of any one type of waste present in the area?	YES NO
•	If yes,	
6.4.E.3.b	b. Has the amount in excess of 55 gallons been in the satellite accumulation area longer than 3 days?	YES NO
	If <u>yes</u> ,	
6.4.E.3.b. 6.4.E.1.b.	c. Has the company notified the Department about the location of the accumulation area?	yes no NA
	10. Comments:	

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CHECKLIST FOR HAZARDOUS WASTE INSPECTION OF GENERATORS

	THOTEGO	
Name of Facility:	REHRIG INTERNATIONAL	
	901 D. LOMBARDY STREET	
Address:	RICHMOND, VA. 23220	
<u> </u>	AD 089028377	
EPA ID Number: V	tative: Paul BAYZ	
Facility Represen	PLATING MANAGER	
Title:		
Telephone Number	(<u>804</u>) <u>355-7864</u>	
Inspector's Name:	GLENN MOORE	
mi+lo:	CHEMISI	
Date of Inspection	n:	
Va. Hazardous Waste Reg. 6.3.	1. Is a manifest system currently being used for all hazardous waste shipped off site? 2. Has the generator determined that the transporter(s) and facility have an EPA ID number? [Note: Shipments to POTWs must be manifested and the POTW must meet all permit-by-rule requirements of VHWMR Section 11.8.B.]	
5.5.A.7	3. Has the generator determined that the transporter has a valid EPA Identification number and a valid Virginia Transporter Permit?	0
6.3 5.3.B.1.	4. Is the following information on the manifest:	

- The generator's name, mailing (YES) ИО address, EPA ID Number, and telephone number?
- b. A unique five digit number assigned (YES to this manifest by the generator?
 - NO

NO

ИО

- 5.3.B.3. manifest?
- The total number of pages of the (YES ИО
 - The company name and EPA ID number (YES of each transporter used?
 - The company name, site address, and (YES facility number of the EPA designated to receive the waste?
 - The U. S. DOT description of each (YES waste to include its proper shipping name, hazard class, and I.D. number (UN/NA) as identified in the Virginia Governing Regulations Transportation of Hazardous Material?
 - The quantities of waste being (shipped?
 - The following certification: "I hereby declare that the contents of fully are consignment this accurately described above by proper classified, shipping name and are packed, marked, and labeled, and are in all respects in proper condition for transport by (mode of transportation) according to applicable international and national governmental regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to a degree I have economically be determined to practicable and that I have selected the practicable method of treatment, currently disposal storage, or available to me which minimizes the present and future threat to human health and environment."

5.3.B.2.

- 5.3.B.4.
- 5.3.B.5.
- 5.3.B.6.
- 5.3.B.7.
- 5.3.C.

6.5.C.2.	5. Have manifests been received from the TSD facility for any waste which was shipped over 45 days ago?	YES NO
	If <u>no</u> , has the generator filed an exception report with the Executive Director which included:	NA-
6.5.C.2.a.	a. A legible copy of the manifest for which the generator does not have confirmation of the delivery; and	VES NO
6.5.C.2.b.	b. A cover letter explaining the efforts taken to locate the shipment?	YES NO
6.4.E.1.	 Is hazardous waste being accumulated on-site for less than 90 days? If yes, 	YES) NO
6.4.E.1.a.	a. Is the waste stored in containers? In tanks? (If answer to either question is yes,	YES NO
	(If answer to either question in fill out appropriate checklists. If both answers are no, interim status or a TSD permit is required - fill out facility checklist to determine compliance status).	*34
6.4.E.1.b.	b. Is the date that accumulation begins clearly marked and visible for inspection on each container?	(YES) NO
6.4.E.1.c.	c. Is each container and tank clearly marked with the words "Hazardous Waste"?	YES NO
6.4.E.l.e.	d. Has the generator notified the Executive Director by March 1, 1988, of the exact location of the existing accumulation areas, and at least 15 days prior to use for subsequently established accumulation areas?	YES NO
6.4.E.2.	7. Does the generator accumulate (store) hazardous waste on-site for greater than 90 days? If <u>yes</u> , interim status or a TSD permit is required - fill out facility checklist to determine compliance status.	
6.4.E.l.d.	8. Does the generator record inspections	YES NO

9.1.F.4.	in an inspection log?
6.4.E.l.d. 9.1.G.l.	9. Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures?
9.1.G.2.	10. Have new employees to the facility (YES) NO successfully completed training mentioned above within 6 months of their employment or assignment to the facility?
9.1.G.3.	11. Do personnel participate in an annual (YES) NO review of the initial training?
	12. Does the facility maintain a record of the following:
9.1.G.4.a.	a. job titles for each position at the YES NO facility related to hazardous waste management; and
9.1.G.4.a.	b. the name of the employee filling YES NO each job; and
9.1.G.4.b	c. a written job description for each (YES) NO position in (a); and
9.1.G.4.c.	d. a written description of the type (YES) NO and amount of both introductory and continuing training that will be given to each person filling a position
	listed in (a); and
9.1.G.4.d.	e. Records that document that the YES NO training or job experience required above has been given to, and completed by facility personnel?
9.2.B. 9.2.D.	13. At the facility, is the following equipment installed:

9.2.B.1. 9.2.B.2. 9.2.B.3. 9.2.B.4.

9.2.C.

9.2.E.

- instructions to emergency hazardous the personnel if generation or accumulation areas are threatened by hazardous waste release, fire or explosion? b. A device (at the scene of hazardous (YES
- a. An internal communications or alarm ИО system capable of providing immediate facility
 - waste generator operations) capable of summoning emergency assistance from Police, Fire Departments, etc.?
- Portable fire extinguishers, fire decontamination and control, equipment?; and
- Water at adequate volume and supply expected pressure to foam producing equipment, demands, automatic sprinklers or water spray system?
- ИО
- Is a record of tests and inspections (YES 13 a-d maintained items of facility?
- NO
 - 15. Does the facility have adequate aisle space to allow the unobstructed movement of personnel, fire protection equipment, equipment, control spill during equipment decontamination emergencies?
- NO

- 6.4.E.1.d. 9.3.
- Does the facility have an established (YES with deal plan to contingency unplanned sudden or non-sudden release of hazardous or waste constituents to the air, soil, water or surface water?
- 17. Does the contingency plan contain the 9.3.B. following elements:

9.3.B.(1,2).	a. A detailed description of emergency YES NO procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous waste to air, soil, and water?
9.3.B.3.	b. A description of arrangements (YES) NO agreed to by local police departments, fire departments, hospitals, contractors and Commonwealth and local emergency response teams to coordinate emergency services, as required?
9.3.B.4.	c. A listing of names, addresses, and Office and home phone numbers of all persons qualified to act as emergency coordinator? List primary Coordinator.
	Name Paul BAUZ
	Title Pout , Ny MANAGER
	Telephone (H) 262-2268 (A) 3.55 /86 /
9.3.B.5.	d. A list of appropriate emergency YES No equipment necessary to cope with emergencies at the generator facility?
9.3.B.6.	e. Does this list specify the location and physical description of each item on the list and a brief outline of its capabilities?
9.3.B.6.	f. An evacuation plan for the YES No generator facility where there is a possibility that evacuation could be necessary?
9.3.C.	g. Have copies of the contingency plan (YES) No been sent to all local police departments, fire departments, hospitals and Commonwealth and local emergency response teams? List: RICHMOND POLICE, FILE + Rog, Sg.

9.3.C.	
9.3.F.(9,10).
	·

Is there documentation to indicate (YES) the personnel listed above received the contingency plan?

Has the contingency plan ever been implemented?

If yes, was a written report filed with the Executive Director and were Director and Executive required authorities properly notified before operations resumed?

YES

6.4.E.3.a.

Does the generator have satellite 18. accumulation areas? If yes,



Is the area located at or near the point of hazardous waste generation where the wastes initially accumulate?



good in containers the Are b. condition?



c. Are the containers compatible with (YES) the waste?



6.4.E.3.a.(1) 9.8.D.1.

6.4.E.3.a.(1)

6.4.E.3.a.(1)

9.8.B.

9.8.C.

Are the containers kept closed except as necessary to add or remove waste?



6.4.E.3.a.(2)

e. Are the containers marked with the words "Hazardous Waste" or other words that identify the contents of the container?



6.5.E.3.b.

of those Are amounts in excess in accumulated being satellite accumulation area? If yes,

(NO) YES

Has the generator marked the excess amount with the date the excess amount began accumulating?

NO YES NA

Has the generator either removed the excess amount within three days of the date of excess accumulations or has he complied provisions with all other listed areas accumulation question 5 on this checklist? notified he has Namely,

E 1	Executive Director about the Location of the accumulation area?
. 3	If <u>no</u> , what has the generator chosen to do?
77	s the generator retain copies of (ES) NO fests, annual reports, and test for at least three years?
report f	the facility submitted an annual YES NO or the preceding calendar year?
21. Com The INI Closuce become	ments: The factify is closing Terim Status STORAGE UNIT. AFTER 15 COMPISION, TULACITITY WILL a LARGE QUANTITY (FENERATOR.

6.5.A.

6.5.B.

CHECKLIST FOR THE INSPECTION OF INTERIM STATUS HAZARDOUS WASTE FACILITIES

Name of Facility:	REHRIG INTERNATIONAL 901 D.LOMBARDY STREET RICHMOND, VA. 23220	
Title: Telephone Number:(Inspector's Name:	DO89028377 tive: Pauk BAU Z PLATING MANAGER 804)355-2864 GLENN MOORE CHEMIST	
Va. Hazardous	Does this facility: (Circle One) Store Treat Dispose Hazardous Waste?	
9.1.D. 2. ana	Does the facility have a waste lysis plan?	YES NO
9.1.D.5.a.	yes, does it contain:a. The parameters for which each hazardous waste will be analyzed?	YES NO
9.1.D.5.b.	b. The test methods for each parameter?	YES NO
9.1.D.5.c.	c. The sampling method to obtain a representative sample?	YES NO
9.1.D.5.d.	d. The frequency to review the analysis?	

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• ' •		
9.1.D.6.	(For facilities receiving waste from off- site only):	
9.1.D.6.	e. The procedures used to inspect, and if necessary, analyze each shipment of hazardous waste received at the facility?	WA NO
9.1.E.	3. Does the facility have either	-~
9.1.E.2.a.	a. a 24-hour surveillance system?	YES NO
	or	
9.1.E.2.b.	b. A natural or artificial barrier which completely surrounds the active portion of the facility?	YES NO
	AND	
9.1.E.2.c.	c. A means to control entry at all times to the active portion of the facility?	YES NO
9.1.E.3.	4. Is a sign posted at each entrance and at locations in sufficient numbers to be seen from all approaches to the active portion of the facility stating "Danger - Unauthorized Personnel Keep Out"?	YES NO
	•	
9.1.F.2.	5. Does the facility have a written inspection schedule for all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment?	YES NO
	If <u>yes</u> , does the inspection schedule include:	
9.1.F.2.c.	a. The types of problems to look for during the inspection?	YES NO
9.1.F.2.d.	b. The frequency of inspection?	YES NO
9.1.F.4.	6. Does the owner/operator maintain an inspection log or summary of all inspections?	YES NO
•	•	

9.1.G.1.a.	7. Have facility personnel successfully completed a program of on-the-job and classroom instruction in proper hazardous waste management?	YES NO
9.1.G.2.	8. Are new personnel trained within six months after assignment to the facility?	YES NO
9.1.G.3.	9. Are facility personnel given annual reviews of the initial training?	(YES) NO
9.1.G.4.	10. Are the following documents and records maintained at the facility?a. Job titles for each position hazardous waste	VES NO
9.1.G.4.a.	related to hazardous "does management? b. The name of the employee filling each job?	YES NO
9.1.G.4.b.	c. A written job description for each position?	YES NO
9.1.G.4.c.	d. Records to document the amount of introductory and continuing training given each facility personnel?	
9.2.Н.	11. Are all ignitable or reactive wastes stored at the facility separated and protected from sources of ignition or reaction including: open flames; smoking; cutting and welding; hot flames; hot surfaces; frictional heat sparks; spontaneous ignition; and radiant heat?	YES NO
9.2.B.	12. Is the facility equipped with the following:	YES) NO
9.2.B.1.	a. An internal communications or alarm system capable of providing immediate emergency instruction to facility personnel?	
9.2.B.2.	b. A device (telephone, 2 way radio) capable of summoning emergency assistance?	(YES) NO

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9.2.B.3.	c. Portable fire extinguishers, fire control equipment, and decontamination equipment?	YES NO
9.2.B.4.	d. Water at adequate volume and pressure to supply expected fire demands, foam producing equipment, automatic sprinklers, or water spray systems?	(YES) NO
9.2.E.	13. Is adequate aisle space maintained to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area during an emergency?	YES NO
9.3.	14. Does the facility have a contingency plan that includes the following?	
9.3.B.1.	a. Actions that facility personnel will take in response to fires, explosions, or unplanned releases of hazardous waste?	YES NO
9.3.B.3.	b. The arrangements agreed to by local police and fire departments, hospitals, contractors, and Commonwealth and local emergency response teams?	YES NO
9.3.B.4.	c. The name, addresses, and office and home phone of all emergency coordinators?	(YES) NO
	List the primary coordinator: Name Office Telephone Home Telephone 262-2268	
9.3.B.5.	d. A list of all emergency equipment, the location and physical description of the item, and a brief outline of its capabilities?	YES) NO
9.3.B.6.	e. An evacuation plan if necessary?	(YES) NO

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*		(YES) NO
9.3.C.2.	15. Has a copy of the plan been sent to all local police and fire departments, hospitals, and Commonwealth and local emergency response teams that may be called to provide emergency services? List them RICHMOND POLICE FIRE	(TES) NO
**	RES. SQ	X
	•	· · · · · · · · · · · · · · · · · · ·
	STUART CIRCLE HOS pita)
	Is there documentation that the above agencies have received the contingency plan?	YES NO
9.3.D.	16. Has the plan been implemented?	YES NO
	If yes,	
9.3.F.9.	a. Did the owner notify the Executive Director prior to resuming operations?	YES NO
9.3.F.10.	b. Did the owner file a written report within 15 days with the Executive Director?	yes no
9.4.B.1.	17. Does the facility have a written operating record? Does the record include:	YES NO
9.4.B.2.a.	a. A description of the quantity of hazardous waste received and/or generated, and the method(s) and date(s) of its treatment, storage, or disposal?	(YES) NO
9.4.B.2.b.	b. The location of each hazardous waste within the facility?	(YES) NO
9.4.B.2.C.	c. The results of waste analysis and incineration trial tests?	YES NO
9.4.D.	16. Has the facility submitted an annual report for the previous calendar year?	YES NO

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9.4.E.	17. Has the facility accepted any unmanifested waste shipments?	YES NO
11.2.A 11.2.D.2	18. Has the facility submitted a Part B Application? Date submitted:	YES NO
11.3.B.1	19. Has the owner/operator treated, stored or disposed of hazardous waste not specified in Part A of the Permit Application?	YES (NO)
11.3.B.2	20. Does the facility employ processes not specified in Part A of the Permit Application?	YES NO
11.3.B.3	21. Does the facility exceed the design capacities specified in Part A of the Permit Application?	YES NO
11.3.C.1	22. If answer to questions 19, 20, or 21 above was <u>yes</u> , has the owner/operator submitted a revised Part A application?	YES NO
9.6.C.1	23. Does the owner or operator of the hazardous waste management facility have a written closure plan for the facility?	YES NO
	Does the plan include the following:	
9.6.C.2.a	a. A description of how each hazardous waste management unit at the facility will be closed in a manner that minimizes the need for further maintenance, and that controls, minimizes or eliminates post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off or hazardous waste decomposition products?	YES) NO
9.6.C.2.b	b. A description of how final closure of the facility will be conducted in order to minimize those items listed in (a) above?	YES NO

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9.6.C.2.C

c. An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility, and a detailed description of the methods to be used during partial and final closure?

YES

9.6.C.2.d

d. A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure?

YES NO

9.6.C.2.e

e. A detailed description of other activities necessary during the partial and final closure period to ensure that all partial closures and final closure satisfy the closure performance standard?

YES) NO

9.6.C.2.f

f. A schedule for closure of each hazardous waste management unit and for final closure of the facility?

YES NO

9.6.C.2.g

g. An estimate of the expected year of final closure for facilities that use trust funds to demonstrate financial assurance and whose remaining operating life is less than twenty years, and for facilities without approved closure plans?

YES NO

9.6.3

24. Is the closure plan up-to-date with regard to any changes in operating plans or facility design which might affect the closure, expected year of closure, and any unexpected events which might require a modification of the closure plan?

(YES) NO × S.ee COMMONT

FOR OWNER/OPERATORS OF HAZARDOUS WASTE DISPOSAL UNITS, SURFACE IMPOUNDMENTS OR WASTE PILES:

9.6.I.1 25. Has the owner/operator submitted a post-closure plan which includes the following:

• • •		NA
9.6.I.3.a	a. A description of the planned monitoring activities and frequencies at which they will be performed during the post-closure care period?	yes no
9.6.I.3.b	b. A description of the planned maintenance activities, and frequencies at which they will be performed to ensure the integrity of the cap and final cover or other containment systems, and the function of the monitoring equipment?	YES NO
9.6.I.3.c	c. The name, address, and phone number of the person or office to contact about the hazardous waste disposal unit or facility during the post-closure care period?	YES NO
9.7.B.1	26. Does the owner/operator have a detailed written estimate, in current dollars, of the cost of closing the facility? Current closure cost estimate:	YES) NO
9.7.B.2	27. Has the owner/operator within 60 days prior to the anniversary date of the establishment of the financial instrument adjusted the closure cost estimate to account for inflation?	YES NO
9.7.C.	28. Has the owner/operator established financial assurance for closure of the facility? What is the financial mechanism?	YES NO
9.7.D.1	29. Does the owner/operator have a detailed written estimate, in current dollars, of the post-closure cost of the facility? Current post-closure cost estimate:	yes no

9.7.D.2	30. Has the owner/operator within 60 days prior to the anniversary date of the establishment of the financial instrument adjusted the closure cost estimate to account for inflation?	ves no
9.7.E	31. Has the owner/operator of the facility established financial assurance for the post-closure of the facility? What is the financial mechanism?	yes no NA
9.7.G.1	32. Has the owner/operator of the hazardous waste treatment, storage, or disposal facility demonstrated financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities? What is the latest submission date?	yes (no) * Sai Compia
	List the type of mechanism used and the documentation to support the mechanism:	•
	33. Comments:	
	TACILITY IS CLOSING, WILL BE a GENERATOR AFTER CLOSURE IS APPROVED.	

YES

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GREEN : LESS THAN 90 DAY ACCUMULATION AREA

ORANGE : SATELLITE ACCUMULATION AREA

Bowe Street

O

Leigh Street

CHECKLIST FOR HAZARDOUS WASTE INSPECTION OF LAND-RESTRICTED WASTE MANAGEMENT

Name of Fa	cility: REHRIG INTERNATIONAL		
Address:	901 N. LOMBARDY STREET		
· · · · · · · · · · · · · · · · · · ·	RICHMOND, VA. 23220		
	ber: VAD 089028377	X .	
Facility R	epresentative: Paul Bauz		
Title:	PLATING MANAGER		
Telephone	Number: (804) 355-7864		
Inspector'	s Name: GLENN MOSKE		
Title:	CHEMIST		
	spection:		
	 Does the facility generate, transport, or treat, store or dispose any land-restricted wastes? (See Attachment) 	YES	по
	If <u>yes</u> , please list:		
15.1.A.3.	2. Is land disposal of wastes listed in 1 above occurring?	YES	ИО
	If <u>yes</u> , then:	Op. 1	
15.1.A.3.a.	a. Has the facility been granted an extension to the effective date for land restrictions applicable to its restricted waste? (See effective dates listed in Attachment)	YES	ИО
15.1.A.3.b.	b. Has the facility been granted an exemption from prohibition pursuant to a petition for those land-restricted wastes and units covered by the petition?	YES	170

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.5.1.A.3.c:	c. Is the waste generated by small quantity generators of less than 220 pounds (100 kg) of hazardous waste, or 1 kg of acutely hazardous waste, per month?	YES NO
15.1.E.	d. Has the owner/operator submitted an application for a case-by-case extension to the effective date of any applicable restriction?	YES NO
15.1.F.	e. Has the owner/operator been granted a petition seeking an exemption from a prohibition for the disposal of hazardous waste in a particular unit or units?	YES NO
15.1.D.1.	3. Is the facility treating land-restricted wastes in a surface impoundment or series of surface impoundments? (If no, go to number 6) [If yes, complete surface impoundment checklist] [Note: Evaporation of hazardous constituents as the principal means of treatment is not considered to be an acceptable form of treatment for land restricted wastes.]	YES NO
	If <u>yes</u> , does the facility meet the following requirements:	A) A
15.1.D.1.b 15.1.G. 15.3.C. 15.4. 15.3.	a. Are the residues of the treatment analyzed as specified in VHWMR Sections 15.1.G.or 15.3.C. to determine if they meet the applicable treatment standards or VHWMR Section 15.4, or where no applicable treatment standard exists, the applicable prohibition levels specified in VHWMR Section 15.3?	YES NO
1.D.1.c. 90.B.1. 10.10.B.3.	b. Has the owner or operator installed two or more liners and a leachate collection system consisting of an upper and lower liner designed, constructed and operated to prevent the migration of any constituents through the liners?	YES NO
15.1.D.1.c. 10.5.	c. Is the facility in compliance with the applicable groundwater monitoring requirements of VHWMR Section 10.5.?	YES NO

Has the owner or operator submitted a YES written certification to the Executive Director 15.1.D.1.d. that items 4 a-c have been met which states, "I certify under penalty of law that the requirements of 15.1.D.1.c. have been met for all surface impoundments being used to treat restricted wastes. I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."? Has the owner/operator submitted a copy of (YES the waste analysis plan for his restricted 5.1.D.1.d. wastes? Has the owner/operator determined if his 15.1.G.1. waste is a land restricted waste? For restricted wastes which the generator (YES 7. is managing for which he has not met the 15.1.G.la. applicable treatment standards, has the generator accompanied each shipment of waste with a notification to the treatment facility of the standards treatment appropriate applicable prohibitions? Did the notification include the following information: NO - EPA Hazardous Waste Number; 15.1.G.1.b.1a - The corresponding treatment standards NO 1.G.1.b.1b and all applicable prohibitions set forth in VHWMR Section 15.3.C; - The manifest number associated with the NO 15.1.G.1.b.1c shipment of waste; - Waste analysis data, where available? NO 15.1.G.1.b.1d

8. For restricted wastes which the generator has determined can be land disposed without further treatment, has the generator accompanied each shipment of waste with a notification and certification to the land disposal facility that the waste meets the applicable treatment standards and the applicable prohibitions of VHWMR Section 15.3.C?

NO

a. Did the notification contain the following information:

15.1.G.1.b.

•		AIA
15.1. G. 1.b.1a	- EPA Hazardous Waste Number;	YES NO
15.1.G.1.b.1b	- The corresponding treatment standards and all applicable prohibitions;	YES NA NO
15.1.G.1.b.1c	- The manifest number associated with the shipment of waste; and	YES NA
15.1.G.1.b.1d	- Waste analysis data, where available?	YES NO
15.1.G.1.b.2.	b. Was the certification signed by an authorized representative, and did it state the following:	YES NO
	"I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in VHWMR Section 15.4. and all applicable prohibitions set forth in VHWMR Section 15.3.C. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment."	
15.1.G.1.c.	9. For restricted wastes which have received	YES NO
	a case-by-case exemption, been granted an exemption through petition, or those wastes subject to a national variance, has the generator forwarded a notice with the waste to the land disposal facility stating that the waste is	NA
	exempt from the land disposal restrictions?	A I A
15.1.G.2.	10. For Treatment Facilities ONLY: Has the owner or operator of the treatment facility tested the treatment residues or extract to assure that they shall meet the applicable treatment standards?	YES NO
15.1.G.2.	a. Has, this testing been done at the frequency stated in the waste analysis plan?	YES NO
15.1.G.2.a. 15.1.G.1.a.	b. For treatment residuals which do not meet the applicable treatment standards, has the facility filed the notification in 8 above as a generator to any subsequent treatment facilities?	YES NO

YES NO

L5.1.G.2.b.

c. For treated wastes meeting the applicable treatment standards, or for wastes not subject to any treatment standards, has a certification been signed and accompanies each shipment stating:

"I certify under penalty of law that I have personally examined and am familiar technology and with the treatment operation of the treatment process used to support this certification and that, based inquiry of those individuals on my immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to achieve the performance levels specified in VHWMR Sections 15.4 15.3.C. without dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

OR (for wastes with treatment standards expressed as technologies)

"I certify under penalty of law that the waste has been treated in accordance with the requirements of VHWMR Section 15.4.C. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

11.	Comments:	
	-	

Attachment - Land Restricted Wastes

<u>Waste</u>	Effective Date
F001 - F005	11/08/86
F001 - F005 from Small Quantity Generators	11/08/88
F001 - F005 generated via RCRA corrective actions or CERCLA response actions	11/08/88
Hazardous wastes containing less than 1% total F001 - F005 solvent constituents	11/08/88
F001 - F005 soil and debris resulting from RCRA corrective actions or CERCLA response actions	11/08/90
Dioxin wastes F020 - F023, F026 - F028	11/08/88
F020 - F023, F026 - F028 soil and debris resulting from RCRA corrective actions or CERCLA response actions	11/08/90

California Listed Wastes

Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing free cyanides at concentrations greater than or equal to 1,000 ppm (mg/l). [Effective 7/8/87]

Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing any of the following metals or compounds of these metals at concentrations greter than or equal to those specified below:

Arsenic (as As)	500 mg/l
Cadmium (as Cd)	100 mg/l
Chromium (as Cr VI)	500 mg/l
Lead (as Pb)	500 mg/l
Mercury (as Hg)	20 mg/l
Nickel (as Ni)	134 mg/l
Selenium (as Se)	100 mg/l
Thallium (as Tl)	130 mg/l

Liquid hazardous wastes having a pH less than or equal to 2.0. [Effective 7/8/87]

Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm. [Effective 7/8/87]

Liquid hazardous wastes, primarily water, containing greater than or equal to 1000 mg/l HOCs, but less than or equal to 10,000 mg/l HOCs. [Effective 7/8/87]

California waste contaminated soil and debris resulting from RCRA corrective actions or CERCLA response actions. [Effective 11/8/90]

Liquid hazardous wastes, not primarily water, containing greater than or equal to 1000 mg/l HOCs. [Effective 11/8/88]

Nonliquid (non-RCRA/CERCLA) hazardous wastes containing greater than or equal to 1000 mg/l HOCs. [Effective 11/8/88]

First Third Wastes	Effective Date
FIRST THIRD MUDGES	
	8/8/88
F006 (nonwastewater)	8/8/88
K001	8/8/88
K004 (nonwastewater)	8/8/88
K008 (nonwastewater)	8/8/88
K015	8/8/88
K016	
K018	8/8/88
K010 K019	8/8/88
	8/8/88
K020 K021 (nonwastewater)	8/8/88
K021 (nonwastewater)	8/8/88
K022 (nonwastewater)	8/8/88
K024	8/8/88
K025	8/8/88
K030	8/8/88
K036 (nonwastewater)	8/8/88
K037	8/8/88
Nonexplosive K046 (nonwastewater)	8/8/88
K047	8/8/90
K048 - K052	
voco (nonwastewater)	8/8/88
wast (nonvectowater less than 106 21	3) 8/8/88
1b ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	6 211)
	8/8/88
K062 (nonwastewater)	-8/8/88
Non-CaS04 K069 (nonwastewater)	8/8/90
K071	8/8/88
K083 (nonwastewater)	8/8/88
K086 (solvent washes)	8/8/88
K087	8/8/88
К099	8/8/88
K100	
K101	8/8/88
K102	8/8/88
	8/8/88
KIOS	8/8/88
K104 Soil and debris contamiinated with	
first third wastes that have	
first third wastes that have	
treatment standards based on	, 8/8/90
incineration	

"Soft Hammer" First Third Wastes [Effective Date 5/8/90 or as treatment standards are established]

F007	P001	U007	U151
F008	P004	U009	U154
F009	P005	U010	U155
F019	P010	U012	U157
K004	P011	U016	U158
K008	P012	U018	U159
K011	P015	U019	U171
K013	P016	U022	U177
K014	P018	U029	U180
K017	P020	U031	U185
K021	P030	U 036	U188
K022	P036	U037	U192
K031	P037	U041	U200
K035	P039	U043	U209
K036	P041	U044	U210
K046	P048	U046	U211
K060	P050	U050	U219
K061	P058	U051	U220
K069	P059	U053	U221
K073	P063	U061	U223
K083	P068	U063	W226
K084	P069	U064	U227
K085	P070	U066	U228
K086	P071	U067	U237
K101	P081	U074	U238
K102	P082	U077	U248
K106	P084	U078	U249
	P087	U086	
	P089	U089	
	P092	U103.	
	P094	U105'	
	P097	U108	
	P102	U115	
	P105	U122	•
	P108	U124	
	P110	U129	
	P115	U130	
	P120	U133	
	P122	U134	
	P123	U137	

APRIL 1993 REPORT FROM SCHNABEL ENVIRONMENTAL SERVICES

41650

Rus 171

REHRIG ESA UPDATE APRIL 1993 933083

Schnabel Environmental Services

A Division of Schnabel Engineering Associates, Inc.

933083, Environmental Site Assessment Update, Rehrig Facility, 901 North Lombardy Street, Richmond, Virginia

Schnabel Environmental Services

A Division of Schnabel Engineering Associates, Inc.

JAMES J. SCHNABEL, P.E. RAY E. MARTIN, Ph.D., P.E. RAYMOND A. DeSTEPHEN, P.E.

April 26, 1993

BRIAN MILNER, C.P.G. CARL P. BENSON, C.P.G., P.E.

Rehrig International 901 N. Lombardy Street Richmond, Virginia 23220

Attn: J. Randolph Daniel

Subject:

933083, Environmental Site Assessment Update, Rehrig Facility, 901 North Lombardy Street, Richmond, Virginia

Gentlemen:

We are pleased to submit our report for the above referenced project. This study was performed according to our proposal dated January 29, 1993. The report was prepared in accordance with generally accepted environmental practice and we make no warranties, either express or implied, as to the professional advice provided under the terms of our agreement and included in this report.

We appreciate the opportunity to be of service for this project. If you have any questions concerning this report, please do not hesitate to contact either of the undersigned.

Very truly yours,

SCHNABEL ENVIRONMENTAL SERVICES

Russell S. Harris, Jr. Senior Staff Engineer

Brian Milner, C.P.G. Associate

RSH: BM: mrm

April 26, 1993

Rehrig International 901 N. Lombardy Street Richmond, Virginia 23220

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RSH:BM:mrm

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1.0 EXECUTIVE SUMMARY

Studies were performed at the Rehrig International Facility to update a previous Environmental Site Assessment (ESA) by Radian Corporation, and the Phase II soil sampling and chemical testing by Hatcher-Sayre, Inc. The studies included a site walk-through, soil sampling and chemical testing, review of Rehrig waste disposal practices and potential impacts of on-site incidents since the previous ESA.

From reasonably available Federal, State and local records there are no hazardous waste transport, storage or treatment facilities, environmental incidents or underground storage tanks (UST) registered either on the site or adjacent to it. The site has not been included on the National Priority List (NPL) but is listed on the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) with a "No Further Action Status" by the Environmental Protection Agency (EPA). No active or inactive landfills, or facilities with Virginia Pollution Discharge Elimination System (VPDES) permits are documented at the site or adjacent properties. In addition, there are no NPL, CERCLIS or landfill sites, or VPDES discharges documented within one mile of the assessment site on the available records.

Two incidents have occurred at the site since the last environmental review. The first incident was the discovery and subsequent removal of soil contaminated by hydraulic oil. The contamination is thought to have occurred prior to Rehrig's occupancy of the site. The second incident was a chemical reaction caused by sodium hydrosulfite that was isolated to a 55 gallon drum trash container. Both incidents were closed to the satisfaction of the State Water Control Board (SWCB) and the Richmond Fire Department. In addition, a UST was removed from the site in 1988. Soil samples collected during this study from borings in the vicinity of the tank excavation showed low levels of petroleum hydrocarbon contamination (see Table 1). The levels were below the reportable level of 100 mg/kg set by the SWCB.

We performed a plant walk-through to observe the aspects of Rehrig's manufacturing operations, in particular the plating operations and waste disposal practices at the facility. Waste water from the plating operation is discharged to the city sewer system after treatment. The solid waste from the treatment system is removed from the site by a registered hazardous waste handler. Metal shavings are sent to Peck Metals for recycling. and parts cleaner from all parts of the operation are collected by recycling firms. Hazardous materials and hazardous waste (prior to collection) are stored in areas designed to meet regulatory requirements. A new plating machine is presently being installed. Both plating areas have dikes for containment of spills. The other fabrication, manufacturing operations, including the metal injection molding, and assembly operations do not involve hazardous materials or hazardous waste and pose a low risk of environmental impairment.

The results of the chemical analyses on the soil samples collected from the plating area and the UST location are similar to

those obtained by Hatcher-Sayre. These results indicate that since the last environmental review, environmental conditions at the site are likely unchanged. The analyses of the soil samples collected from the plating area show that the levels of chromium and nickel would not be considered hazardous because they are below the Environmental Protection Agency (EPA) criteria (see Table 2). Levels of total Chromium and total Nickel are consistent with those occurring naturally in soils.

Two off-site incidents are unlikely to result in environmental impairment at the site. These involve waste oil handling at City Auto Wrecking (across Leigh Street northwest of Rehrig) and a UST removal at D.W. Mallory Company (about one half mile from Rehrig).

Rehrig's facility does carry some potential for environmental impairment due to the hazardous materials and petroleum products used in the operations. However, the current Rehrig management has reduced the risk of environmental impairment to a low level by the use of sophisticated equipment, procedures, and safety systems. These include a spill and prevention control plan, removal of a UST, secondary containment dikes, and the removal of waste oil, scrap metal, and hazardous materials from the site. The analyses performed indicated that over the past five years since the previous environmental assessment was conducted, no environmental deterioration is apparent at the site.

TABLE 1 - SAMPLES FROM UST LOCATION

SAMPLE	TPH (ppm)	REPORTING LEVEL (ppm)
B-1	39.0	100.0
B-2	<0.5	100.0
B-3	<0.5	100.0
B-4	<0.5	100.0

TABLE 2 - SAMPLES FROM PLATING AREA

SAMPLE	CHROMIUM (ppm)		NICI (PI	KEL pm)	TCI CHROM (pp	IUM	TCLP N	
	H-S	SES	H-S	SES	SES	EPA	SES	EPA
HA-1 HA-2 HA-3 HA-4 HA-5	40.0 NS NS 25.0 45.0	13.5 54.2 31.0 19.4 116.3	15.0 NS NS 15.0	3.9 7.0 18.2 24.4 66.5	<0.5* <0.5* <0.5* <0.5* <0.5*	5.0 5.0 5.0 5.0	<.14* <.14* <.14* <.14* <.14*	NL NL NL NL

Notes: TPH = Total Petroleum Hydrocarbons

TCLP = Toxicity Characteristic Leaching Procedure

H-S = Hatcher-Sayre

SES = Schnabel Environmental Services

NS = No sample collected by Hatcher-Sayre

NL = No limits currently established

*Levels below detection limits

2.0 INTRODUCTION

Rehrig International manufactures shopping carts and other similar products at its facility located at 901 North Lombardy Street, Richmond, Virginia. The location of the facility is shown on the Vicinity Map in Figure 1. The manufacturing process involves metal fabrication, injection molding that produces plastic parts composed of high density polyethylene (HDPE), and metal plating of nickel and chromium onto the metal parts of the shopping cart. Rehrig leases the facility and is concerned that its operation may result in environmental impairment at the site. Radian Corporation, Herndon, Virginia, conducted an environmental site assessment (ESA) at the Rehrig facility in February 1988.

The objective of our study was to update the ESA and provide a report indicating the potential for environmental impairment at the site. Our scope of work included the following:

- Data Collection
- Soil Sampling
- Analytical Chemical Testing
- Environmental Site Assessment Update Report

Our services did not include inspection or testing for contamination such as asbestos, radon, or methane gas. No geotechnical or remedial recommendations, wetland assessments, deed or property record searches, historical site use review, or detailed geohydrologic analysis were included in this study.

3.0 SUMMARY OF PREVIOUS STUDIES

To gather data for the ESA in February 1988, Radian conducted a walk-through of the facility to observe plant operations and waste handling, and interviewed plant personnel. Their study included contacting Rehrig's waste oil hauler, the real estate firm who leased the property to Rehrig, and State and Local officials regarding environmental compliance.

Radian's study found that the building was about 100 years old and had been occupied by several businesses. Originally, the building was used to process and store tobacco. Subsequent tenants included the State Penitentiary, a book binding business, and an air filter products manufacturing operation.

From the gathered data, Radian concluded that "the facility was generally clean, free of debris, and appeared to be maintained in good order; no visual evidence of hazardous chemicals at the ground surface posing a threat to the environment was revealed in their investigation, and Rehrig complied with existing permits to generate and store hazardous waste, and to discharge treated wastewater from plating operations to the Richmond Sewer System."

They made the following recommendations:

- An underground diesel fuel tank located on the property should be tested for tightness and registered with the Virginia State Water Control Board (SWCB).
- sludge from the plating wastewater sump should be handled as a listed waste and that the sump should be periodically checked for leaks and integrity of the epoxy sealer coat.
- Rehrig should contact the City of Richmond regarding discharge of industrial wastewater to determine the need for discharge permits.

A Phase II study was performed in February 1989 by Hatcher-Sayre, Inc., Richmond, Virginia. Hatcher-Sayre also conducted a walk-through of the facility. To evaluate the potential for soil and ground water contamination from both the plating operation and the underground fuel storage tank (UST), Hatcher-Sayre collected soil samples from three locations adjacent to the plating area and three locations adjacent to the UST. Samples taken adjacent to the plating area were analyzed for pH, sulfates, total chromium, hexavalent chromium, and nickel. Based on the chemical test results, they concluded that there was "no evidence of significant leakage from existing or past plating operations." They also suspected that a minor sulfuric acid spill may have occurred at the sample location outside the building adjacent to the plating area, based on the results showing elevated sulfates and low pH values.

To evaluate the UST, Hatcher-Sayre conducted soil vapor analyses at five locations in the vicinity of the UST. No soil samples were tested for total petroleum hydrocarbons. Soil vapors were analyzed with a photoionization device (PID) and values obtained ranged from 0 to 2.6 ppm. From the data, they concluded

that they "found no evidence of hydrocarbons in the tank pit surrounding the underground tank."

4.0 INFORMATIONAL SOURCES

In order to update the previous studies, the EPA CERCLIS, NPL, and DWM (Department of Waste Management) Solid Waste Management Facilities list were reviewed for facilities on those databases within one mile of the site. The SWCB (State Water Control Board) was contacted to obtain VPDES (Virginia Pollution Discharge Elimination System) permits located within one mile of the site. Also, the available SWCB incident lists from January 1988 through December 1992 were reviewed for surface and ground water contamination incidents.

The most recent UST (Underground Storage Tank) files (October 1992) maintained by the SWCB were reviewed for registered tanks. The DWM Hazardous Waste Activity Notifiers List was reviewed to determine if hazardous waste generators, handlers, storers, or transporters of hazardous materials are located on or adjacent to the site. In addition, our office reviewed a DWM search of their files for incidents in the site vicinity. We contacted the Richmond Fire Department regarding responses by them to the assessment site or adjacent properties for hazardous materials (HAZMAT) spills. We contacted Cavanaugh Corporation, W.B. Goode Company, and F.W. Baird in regard to removal and tank tightness testing of the diesel fuel UST.

Rehrig International supplied us with a site plan, copies of Hatcher-Sayre's report and Radian's report, correspondence with the State Water Control Board, and a copy of Rehrig's Wastewater Treatment Plan.

5.0 WALK-THROUGH

On March 23, 1993, Russ Harris of Schnabel Environmental Services, accompanied by Randy Daniel of Rehrig, conducted a walk-through of the facility. The purpose of the walk-through was to observe and document the conditions of the facility and visual evidence of environmental impairment. Figures 2 and 3 show the locations of various plant operations, hazardous chemical storage, hazardous waste storage, tool and parts solvent cleaning stations, and locations of bottled gas including compressed argon, nitrogen acetylene, and oxygen. A new plating area was being installed in the central portion of the facility at the time of our site visit.

During the walk-through, we noted that the old plating area is surrounded by an 8 inch high by 7 inch wide concrete dike. This dike provides secondary containment for potential spills from the plating tanks. Adjacent to the area were several empty tanks used to hold chemical solutions while maintenance is performed on the production tanks, or to act as temporary storage during an emergency. Mr. Daniel explained that there have been occasional minor spills within the secondary containment, and that the spilled material was channeled into the wastewater treatment trench that leads to the wastewater treatment system.

An overhead conveyor system is located above the dip tanks in the plating area. Cardboard is placed on the concrete floor below the conveyor to absorb rinse water, and thus prevent a slipping hazard on the concrete floor. Mr. Daniel stated that the rinse process involves eight rinsing stages, the last two of which are water rinses. Mr. Daniel considers the drippings to be "clean" and therefore the cardboard is disposed of in a regular trash dumpster located on site. This dumpster is supplied by Browning-Ferris Industries (BFI), and is emptied for disposal in a municipal sanitary landfill.

Also observed in the plating area, were small fragments of plated metal that had fallen from the plating racks after completion of the plating process. To maintain the cleanliness of the area, these metal fragments are swept up. The metal sweepings, and other scrap metal generated as a result of plant operations are deposited in a Peck dumpster for recycling. Peck Metals retrieves this dumpster, located on the west side of the building, on a regular basis.

We observed some leakage from various hydraulically operated equipment. In some cases, the oil is contained by a metal drip pan located under and around the machine. When the pan reaches a certain level, the oil is retrieved and deposited in a waste hydraulic oil tank located inside the building near the northwest corner. Where machines had no drip pan, oil is soaked up by Oil-Dry crystals which are swept up and disposed of in a dumpster. The dumpster is located on the west side of the building. BFI retrieves the dumpster on a regular basis.

Adjacent to the waste hydraulic oil tank is a tank for clean hydraulic oil. The waste hydraulic oil is collected and the clean oil tank filled on an as-needed basis. These tanks are serviced by

James River Petroleum. The tanks are slightly elevated above a sloping concrete-lined pit, with walls about 2.5 ft high at the north end and 1 ft at the south end, for emergency containment of spills and leaks.

There are three hazardous chemical storage areas and one hazardous waste storage area within the building. One hazardous chemical storage area is located and used at each of the old plating and new plating areas, respectively. The third hazardous chemical storage area is located near the injection molding department. The hazardous waste storage location is located approximately at the center of the plant. The hazardous waste location is cordoned off with chains and clearly marked with "keep out" signs. The hazardous waste is the material collected from the filter press as a result of wastewater treatment in the old plating area. The hazardous waste material is secured in 55 gallon drums which are removed by a licensed carrier on an as-needed basis.

The entire floor within the building consists of concrete. Our sampling indicated that this is a six inch thick slab. Several cracks and some small depressions were noted throughout the plant. However, no cracking was noted in the location of hazardous chemical storage, hazardous waste storage, or the old plating area. In the tubing fabrication area, the floor has a noticeable dark appearance. Mr. Daniel stated that the dark appearance is the result of a black residue that exists on the new wire cable and new metal tubing used for manufacture of the carts.

The new plating area, which was not in operation at the time of our walk-through, is located at the previously existing resin storage area shown on Figure 2. The new plating equipment is located on a 6 inch concrete slab. It is surrounded on three sides (west, north, and east) by an elevated concrete wall and walkway. Essentially, the new plating area is located in a three-sided pit. Rehrig plans to construct a secondary containment dike of concrete similar to that located around the old plating area.

Some of Rehrig's quality control/quality assurance is performed in their small laboratory located in the middle of the building. Observation of the lab showed the lab to be generally clean and all glass and plastic containers were sealed (i.e. no open containers).

6.0 ON-SITE ENVIRONMENTAL INCIDENTS SINCE THE 1988 ESA

Several environmental events have occurred at the site since the 1988 ESA by Radian Corporation. These include: closure of a hazardous materials storage area (1990), excavation of a 1,000 gal diesel tank, remediation of hydraulic oil contaminated soil (1991), and installation of new plating equipment.

In October 1990, Rehrig moved one of their hazardous materials storage area. The move involved closure of the former hazardous materials storage area located where the new wastewater treatment system has been installed on the new plating area. The new hazardous materials storage area is located just west of the former location. The former area was officially closed by compliance with Department of Waste Management (DWM) regulations. Rehrig subcontracted Hatcher-Sayre as their consultant for the closure.

A 1000 gallon UST used for storage of diesel fuel was removed on April 14, 1989. F.W. Baird General Contractor removed the tank and backfilled the excavation pit with clean fill. They provided us with a Certificate of Analysis regarding soil samples collected from the excavation. TPH values for composite samples from the excavation and soil stockpile were 100 ppm and 130 ppm, respectively. No formal closure was made to the SWCB by Rehrig.

A letter written by Mr. Daniel to Meade Anderson of the State Water Control Board (SWCB) dated May 20, 1991 described the remediation of hydraulic oil contaminated soil that was encountered during excavation for an injection molding machine foundation at the northwest corner of the facility. It is our understanding that this contamination was related to activities prior to Rehrig occupying the site. A letter dated July 18, 1991 by Jim Tucker of Rehrig to the SWCB explained that a volume of soil about 8 ft wide by 36.5 ft long by 8 ft deep was excavated and disposed of. Again, Rehrig subcontracted Hatcher-Sayre as their consultant for closure. Meade Anderson at the SWCB provided us with the pollution complaint number (PC 92-421), and verified that the closure was completed to the satisfaction of the SWCB.

A second incident, reported to us by Rehrig, occurred in the old plating area, December 5, 1992. According to Rehrig, sodium hydrosulfite which is a caustic added as part of the wastewater treatment process, spilled onto the concrete floor. This compound was swept up and placed into a 55 gallon metal drum. Apparently the drum contained some water whereupon a reaction occurred which resulted in an emission of smoke and fumes. The supervisor in the area responded immediately and placed oil dry into the container to stop the chemical reaction. He also dialed the 911 emergency number to summon the local fire department. Also the emergency chemical hotline was called. He ordered company personnel to evacuate the premises. When the fire department arrived, the reaction was under control in the drum. The reaction was kept under surveillance for a period of four hours to allow the smoke and fumes to dissipate. No personnel were injured, and no damage to the facility's equipment or premises occurred.

Recent construction of a new plating operation was in progress during our walk-through. The construction is near completion and operation is expected to begin soon. We noted that the new machinery rests on top of a 6-inch, sealed, reinforced, concrete slab as previously described in Section 4.0. The new machinery is equipped with a state-of-the-art ventilation system and scrubber which will collect and treat the vapors generated from the plating process.

7.0 SUBSURFACE INVESTIGATION

Six hand auger probes and two test borings were drilled at the site on February 23, and March 18, 1993, to collect soil samples for chemical analysis. The locations are indicated on Figures 4 and 5. Appendix A contains the boring logs and hand auger logs.

Prior to collecting the hand auger samples in the old and new plating areas, we cored through the concrete slab. The samples were collected from about 12 inches below finish floor grade for HA-2, HA-3, HA-4, HA-5 and HA-6. We hand augured to a depth of 3.5 ft below the sidewalk grade for the HA-1 sample. The HA-1 sample was collected from the 3-3.5 ft interval. This is the approximate depth of the wastewater tank in the building. The sample depths were selected to allow direct comparison to the study performed by Hatcher-Sayre. No sample was taken at the HA-4 location due to encountering a second concrete slab about four inches below the top slab. The hole was therefore abandoned. Appendix A contains the hand auger logs. All hand auger holes were backfilled with the remaining cuttings, with the remainder of corehole void filled with concrete. The top few inches of the coreholes were backfilled with a non-shrink grout.

Two test borings were drilled at the location of the diesel tank to provide support information for tank closure documentation. Duplicate sets of soil samples were collected by split spoon sampler at each test boring location and at each sampling interval. After placing soil samples in glass jars, one set of jars was inverted and remained exposed to the ambient air temperature for several hours. This set of soil samples was later checked for petroleum hydrocarbon vapors with a photoionization device (PID). The other set was placed in a cooler containing ice for later transport to EnviroCompliance Laboratories, Ashland, Virginia.

Samples were visually classified in the Unified Soil Classification System according to ASTM D-2487. Soils classified as clayey sand (SC), sandy lean clay (CL), or sandy lean clay fill. All test boreholes were backfilled with the auger cuttings.

Prior to our subsurface sampling, all equipment was decontaminated by steam cleaning and/or washing with a soap solution and rinsing with distilled water. After each sampling interval, the hand auger or split spoon and plug used in test borings, was again decontaminated with the procedure above. This procedure reduces the contamination potential of the soil at increased depths from the soil above. Appendix B contains the detailed procedure of our soil sampling protocol.

8.0 CHEMICAL LABORATORY TESTING

Five soil samples collected from the old and new plating areas were tested for pH, sulfates, total chromium, total nickel, and toxicity characteristic leaching procedure (TCLP) for nickel and chromium. The total metal analysis was selected to facilitate comparison to the Hatcher-Sayre data. The TCLP analysis was conducted to determine whether the metals were above hazardous levels set by the EPA. Results of the testing are included in Appendix C and a summary of the results in Table 3.

The pH values ranged from 4.6 (HA-1) to 9.05 (HA-3). With the exception of the 9.05 pH value, these levels are within the normal range of pH value for the lean clay and clayey sand soils found in the Richmond vicinity. A possible explanation for the 9.05 (HA-3) value may be from contamination of the soil sample with the alkaline cutting liquids generated during the concrete coring process. Another possible source of error lies within the inherent variability of the pH test itself.

Sulfates content of the five hand auger samples ranged from 9.6 to 130.8 ppm. These values are in the normal range for the lean clay soils and clayey sand soils found in the Richmond vicinity. Note that the sulfates content of our HA-1 sample was 9.6 ppm and is much less than the 386.4 ppm result by Hatcher-Sayre. A possible explanation for this large difference may be the heterogeneous nature of soil itself, or possible lab error.

Total nickel values ranged from 3.9 to 66.5 ppm with the HA-6 sample having the highest total nickel content. Total nickel concentrations in United States soils have an average concentration of 40 ppm (Reference 7). Values for total chromium ranged from 13.5 to 116.3 ppm. Total chromium values for U.S. soils range from 1 to 1500 ppm and average 100 ppm. The highest value of total chromium was 116.3 ppm at the HA-6 sample location.

TCLP nickel and chromium were below the detection limits for all the samples. The results indicate that the naturally occurring nickel and chromium in the soil is relatively immobile, and will not migrate or leach out of the soil complex.

The samples obtained from test borings B-1 and B-2, located in the vicinity of a previously existing UST, were screened with a photoionization device (PID). The sample with the highest reading (25 ppm) occurred at a sample depth of 13.5-15.0 ft in boring B-1. This sample along with the B-2 sample at the same depth was submitted for total petroleum hydrocarbons (TPH) testing. These samples appeared to be the naturally occurring Pleistocene terrace soils.

Two other samples were tested for TPH and were taken from the 4-5.5 ft sampling interval. The 4-5.5 ft samples appeared to be a fill material as noted by the inclusion of asphalt fragments in the soil matrix. The transition between the 4-5.5 ft and 7-8.5 ft samples appear to be at the contact between fill and natural soils. We therefore submitted these samples for TPH testing.

TABLE 3 - LABORATORY ANALYSES RESULTS

SAMPLE IDENTIFICATION			NICKEL	SULFATES (ppm)	TCLP (ppm)		
			(ppm)	(ppm)		Ni	Cr
HA-1 (HA-3)	3-3.5 (3-3.5)	4.61 (5.2)	13.5 (40)	3.9 (15)	9.6 (385)	BDL	BDL
HA-2	0.7-1.2	6.50	54.2	7.0	115.4	BDL	BDL
HA-3	0.8-1.5	9.05	31.0	18.2	84.6	BDL	BDL
HA-5 (HA-1)	0.7-1.0 (1-1.5)	8.29 (7.7)	19.4 (25)	24.4 (15)	130.8 (98)	BDL	BDL
HA-6 (HA-2)	0.7-1.2 (1-1.5)	7.58 (7.4)	116.3 (45)	66.5 (5)	169.2 (280)	BDL	BOL
DETECTION LIMIT	-	-	0.1	3.5	5.0	0.14	0.5
REFERENCE METHOD	-	SW-846, METHOD 9045	SW-846, METHOD 7191	SW-846, METHOD 7521	MCAWW, METHOD 375.4	SW-I TCLP EXT METHO	RACTION

^{*} VALUES IN PARENTHESES ARE THOSE OBTAINED BY HATCHER-SAYRE, INC. (1989).

SAMPLE IDENTIFICATION	DEPTH (FT)	PID* VALUE	TPH** VALUE (PPM)
B-1	4-5.5	0	39.0
B-1	13.5-15.0	25	BDL
B-2	4-5.5	0.	BDL
¹ B-2	13.5-15.0	0	BDL
DETECTION LIMIT	-	-	5.0
REFERENCE METHOD	-	-	SW-846 MODIFIED METHOD 8015 (CALIFORNIA TPH FOR SEMI-VOLATILES AS DIESEL

^{*} PID = Photoionization device

^{**} TPH = Total Petroleum Hydrocarbons

Test results of three samples showed TPH values below the detection limit. The sample from 4-5.5 ft in test boring B-1 had a TPH value of 39 ppm. A TPH value less than 100 ppm is not considered reportable by the SWCB.

9.0 ENVIRONMENTAL SITE ASSESSMENT UPDATE

Our data review indicates that while there are no NPL or CERCLIS sites within one mile of Rehrig, the facility itself is still listed on the CERCLIS with a "no further action" status. Rehrig is also listed as a hazardous waste generator, handler, and storer. Rehrig's EPA number is VAD089028377. Transport of the hazardous waste is conducted by a licensed carrier. Although Rehrig treats its wastewater and discharges it to the City of Richmond's sewer system, the Virginia Pollution Discharge Elimination system (VPDES) does not require a permit, since Rehrig's treated wastewater is not directly discharged into any nearby body of water. No adjacent facilities have VPDES permits according to SWCB records.

We further understand that Rehrig is permitted and in compliance with Richmond's wastewater discharge to the municipal sewer system. We understand from Randy Daniel that in September of 1988, Rehrig incurred a violation of their wastewater permit as evident by chemical test results which indicated they had exceeded the nickel and chromium limits. This was a result of the wastewater treatment system not functioning properly. Rehrig brought the system into compliance within a four week period allowed by the City following the occurrence. Rehrig accomplished this by installing equipment that added more stages in the wastewater treatment process. Although the potential for environmental impairment is low to moderate in the wastewater treatment area, the risks have been reduced by good maintenance and periodic inspection of the system.

As described in Section 5.0, Randy Daniel informed us that Rehrig performed closure of a hazardous materials storage area about two years ago. Rehrig also remediated and closed the hydraulic oil contaminated soil to SWCB's satisfaction at the injection molding machine at the north end of the facility. The potential environmental impairment is low at these two locations based on Rehrig's past activities at the time of our investigation.

Rehrig's new plating operation has some potential for environmental impairment to the site. However, the risk of impairment is reduced due to the secondary concrete containment.

Rehrig has a comprehensive plan to control chemical wastes generated by the molding and plating departments. Spill prevention, toxic organic management, baseline monitoring, and a self-monitoring report are included in the plan that was formally implemented in August 1991. We have reviewed this plan and found that it addresses the issues of both human safety and facility integrity. It also includes documentation which shows compliance with the Richmond Department of Public Utilities regulations. The implementation and existence of the plan reduces the risk of environmental impairment to the site.

The incident (PC No. 92-421) which entailed removal of hydraulic oil contaminated soil is considered closed by SWCB (personal communication, Meade Anderson, SWCB). The environmental impairment to the Rehrig site at this location is considered to be

low. The sodium hydrosulfite incident is also unlikely to impair the site as it was contained and remediated on site.

The range of values obtained during this study for pH, sulfates, total nickel, total chromium, and extractable nickel and chromium, compare favorably with the H-S results with one exception. Our sulfates concentration of 9.6 ppm at HA-1 was much lower than the result obtained by H-S. The large difference may possibly be attributed to the inherent heterogeneous nature of soil, differences in locations, lab testing variability, or a combination. Nonetheless, as best as a limited quantity of data from different sources may be compared, we find that no significant variation exists among the data.

The UST containing diesel fuel has been removed and consequently the major source of possible contamination to the site by a leaking UST has also been removed. At the time the UST was removed, samples collected from the excavation and stockpiled soils were at or above the reporting level of 100 mg/kg. We contacted the SWCB regarding tank closure. They indicated that they were unable to give a specific ruling in this case. However, they stated that since the tank was not registered and that the tank was removed prior to UST Corrective Action Requirements becoming effective on October 25, 1989, it is unlikely that the SWCB would pursue the matter. They do always retain the option to open a case should contamination be discovered at a later date. The risk of environmental impairment from the removed tank is low, based on the TPH data which are well below reportable limits and that the tank has been removed.

Oil stains were found on the concrete floor slab throughout the Rehrig facility. These stains are likely attributed to motor oil, hydraulic fluid, or transmission fluid leaking from the company forklifts. These minor contacts with the floor should not significantly impair the site as the concrete floor is 6 inches thick and serves as a barrier to penetration by these fluids.

The City of Richmond has a municipal transfer station located at 500 School Street, behind Emrick Chevrolet. No USTs are registered with SWCB on site or off site on adjacent properties. No hazardous waste transport, storage or treatment facilities, sanitary landfills, sewage treatment facilities, or industrial wastewater discharge facilities were registered within one mile of the assessment site on available records.

One incident recorded by SWCB (PC No. 93-084) involved sloppy housekeeping of waste oil at City Auto Wrecking located at 2050 West Moore Street. This site is located across Leigh Street from the NW corner of Rehrig's facility. David Bowie of SWCB walked the property on September 8, 1992. From his investigation, he identified areas where oil spillage could occur. He recommended that these areas be cleaned up. He made a followup visit on October 7, 1992 and observed that the areas had been cleaned up. The case was considered closed as indicated in a letter dated November 5, 1992 addressed to City Auto Wrecking. This incident has a low risk of environmental impairment to the Rehrig facility.

Another incident (PC No. 92-1902) involved a UST closure at the old D.W. Mallory Company located at the 900 block of Hermitage Road and Leigh Street. The site is about one half mile from Rehrig's facility and unlikely to impair Rehrig's site.

Rehrig's facility does carry some potential for environmental impairment due to the hazards materials and petroleum products used in the operations. However, the current Rehrig management has reduced the risk of environmental impairment to a low level by the use of sophisticated equipment and safety systems. These include a spill and prevention control plan, removal of a UST, secondary containment dikes, and the removal of waste oil, scrap metal, and hazardous materials from the site. The analyses performed indicated that over the past five years since the previous environmental assessment was conducted, no environmental deterioration is apparent at the site.

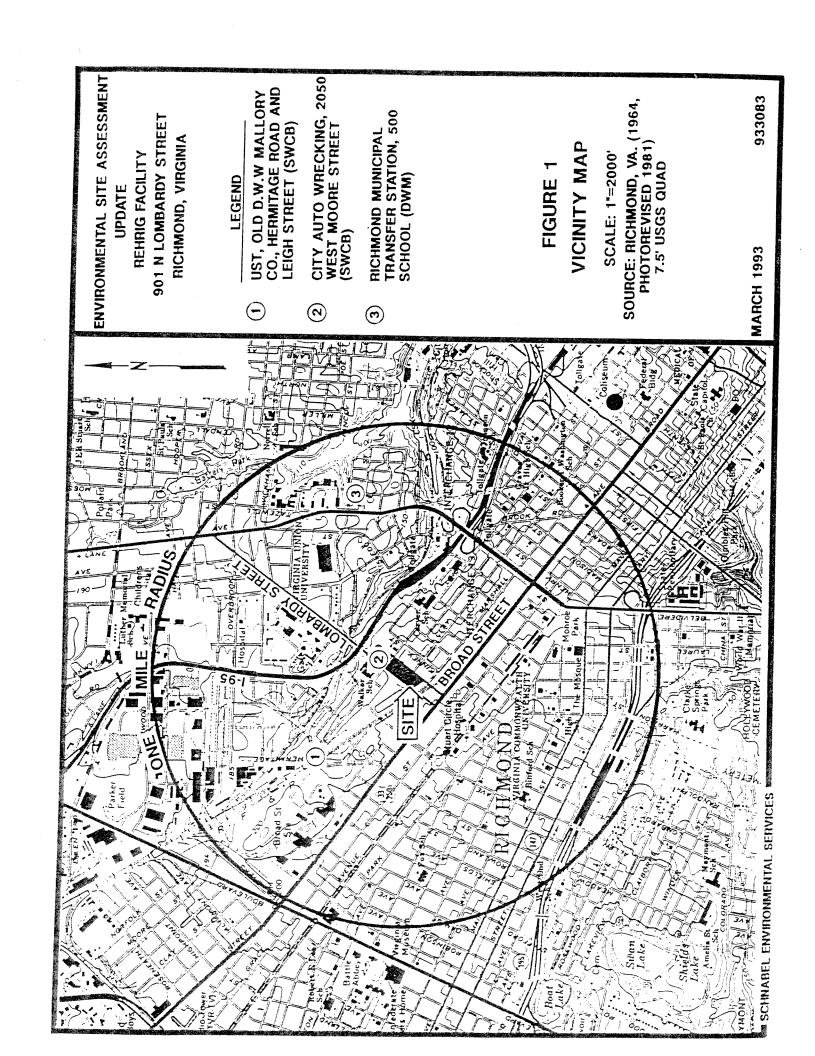
10.0 LIMITATIONS

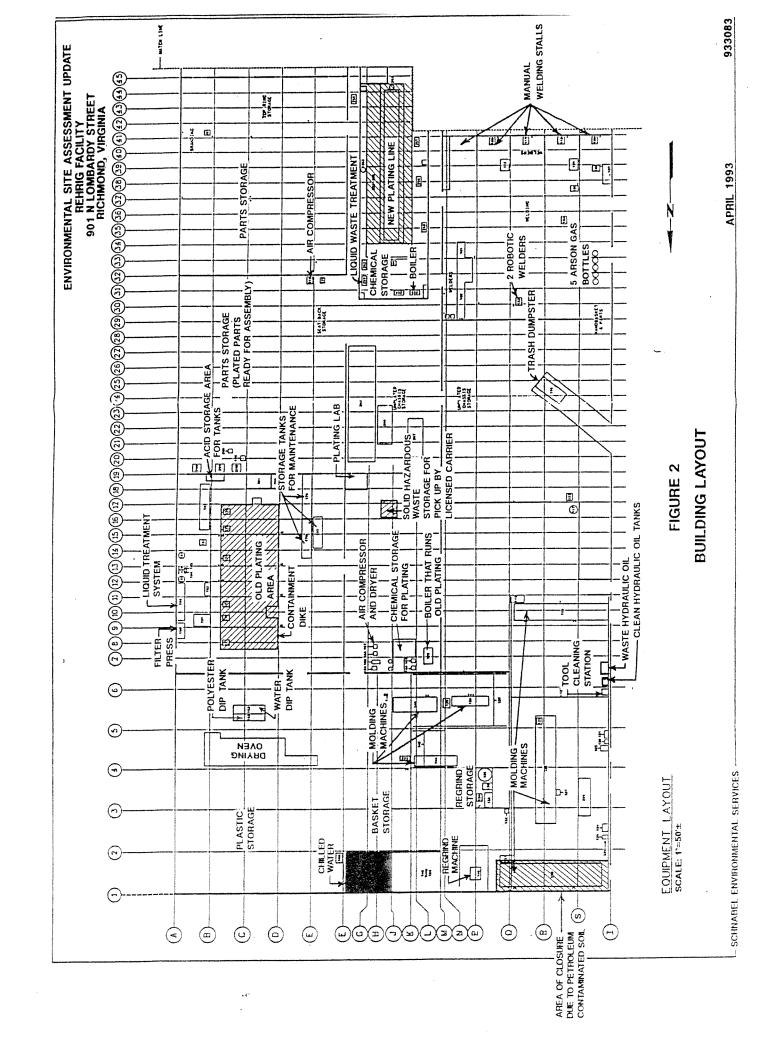
This report was prepared for your use in accordance with the agreed upon scope of services. We have not addressed any issues which may concern the health and safety of Rehrig personnel, as this was not included in our scope of work. Our services were intended to provide an indication of the potential for environmental impairment at the site. We have not included any study of the potential impact that Rehrig's discharges to the air or the municipal sewer system could have. The conclusions provided in this report are based solely on the information reported in this document. Additional information with respect to this site or nearby sites which was not available to us at the time of this assessment, could modify the conclusions stated herein. In addition, our study is only valid for the time it was performed.

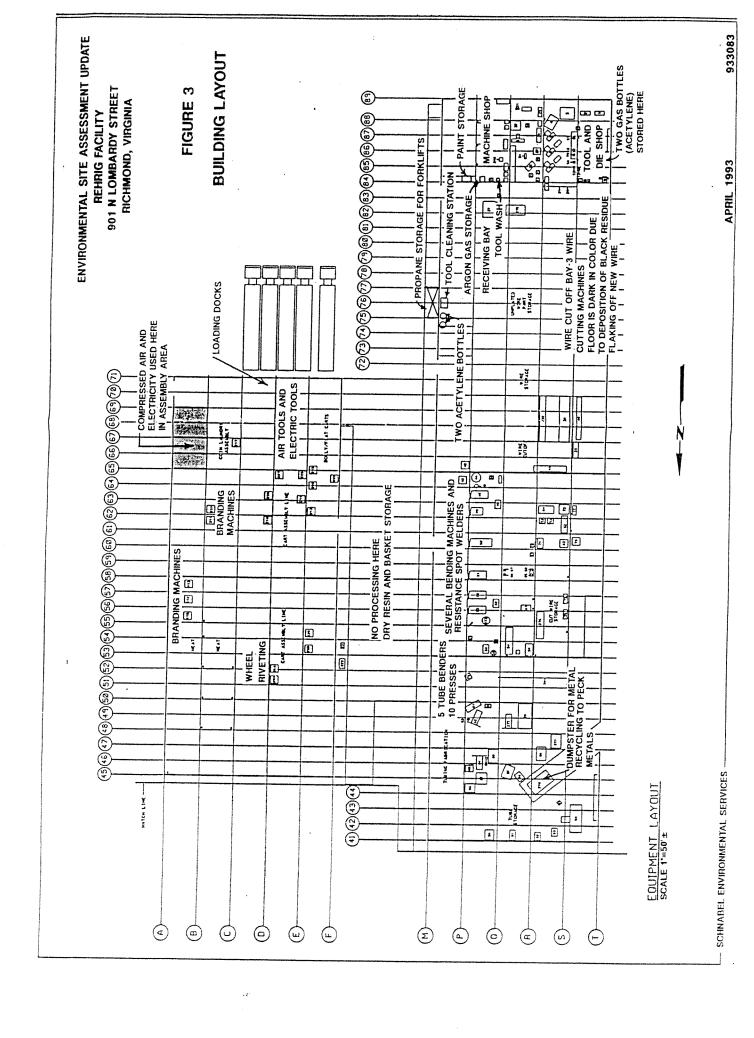
This report has been prepared in accordance with generally accepted environmental practices and we make no other warranties either express or implied, as to the professional advice provided under the terms of our agreement and included in this report.

REFERENCES

- 1. Master List of Virginia Sites on the National Priority List of Superfund Sites; prepared by the Virginia Department of Waste Management, July 1991.
- Master List of Virginia Hazardous Waste Handlers; prepared by the Virginia Department of Waste Management, October 11, 1992.
- 3. Master List of Permitted Solid Waste Facilities in Virginia; prepared by the Virginia Department of Waste Management, February 1992.
- 4. Master List of Underground Storage Tanks, prepared by the Virginia Water Control Board, October 1992.
- 5. Master List of Reported Environmental Incidents, prepared by the Virginia Water Control Board, July 1985 to December 1992.
- 6. Master List of Known, Alleged or Potential Hazardous Waste Sites in Virginia; prepared by U.S. EPA for CERCLIS, October 30, 1992.
- 7. Buckman, Harry O., and Nyle C. Brady, <u>The Nature and Properties of Soils</u>, Published by Macmillan Company, 1969, pp. 290-297, 402-403.

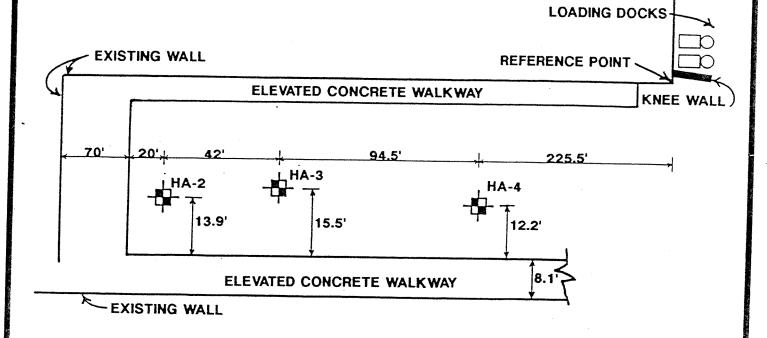




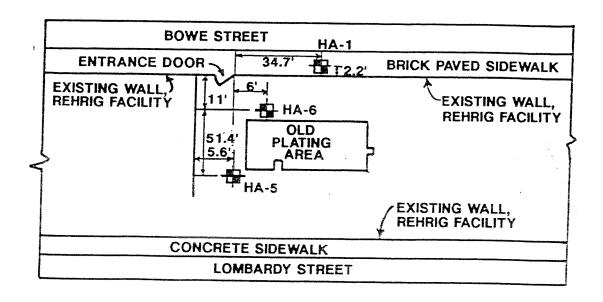


REHRIG FACILITY
901 N LOMBARDY STREET
RICHMOND, VIRGINIA

FIGURE 4 HAND AUGER LOCATION PLAN



NEW PLATING AREA NOT TO SCALE



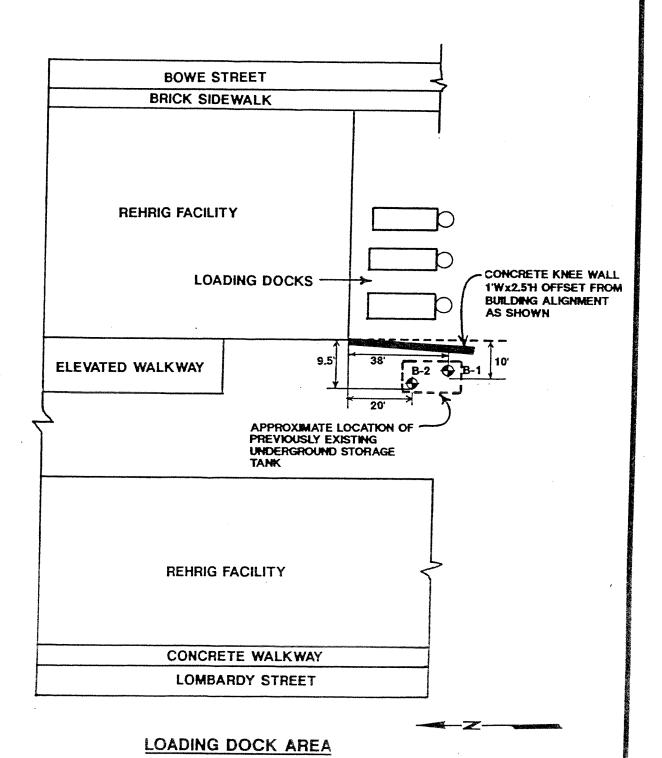
OLD PLATING AREA

NOT TO SCALE

ENVIRONMENTAL SITE ASSESSMENT UPDATE REHRIG FACILITY 901 N LOMBARDY STREET RICHMOND, VIRGINIA

933083

FIGURE 5 TEST BORING LOCATION PLAN



NOT TO SCALE

SCHNABEL ENGINEERING

APPENDIX A

TEST BORING LOGS AND HAND AUGER LOGS

GENERAL NOTES FOR TEST BORING LOGS

- 1. NUMBERS IN SAMPLING DATA COLUMN NEXT TO STANDARD PENETRATION TEST (SPT) SYMBOLS INDICATE BLOWS REQUIRED TO DRIVE A 2 INCH O.D., 1-3/8 INCH I.D. SAMPLING SPOON 6 INCHES USING A 140 POUND HAMMER FALLING 30 INCHES. THE STANDARD PENETRATION TEST N VALUE IS THE NUMBER OF BLOWS REQUIRED TO DRIVE THE SAMPLER 12 INCHES, AFTER A 6 INCH SEATING INTERVAL. THE STANDARD PENETRATION TEST IS PERFORMED IN ACCORDANCE WITH ASTM D-1586.
- 2. VISUAL CLASSIFICATION OF SOIL IS IN ACCORDANCE WITH TERMINOLOGY SET FORTH IN "IDENTIFICATION OF SOIL." THE ASTM D-2487 GROUP SYMBOLS (e.g. CL) SHOWN IN THE CLASSIFICATION COLUMN ARE BASED ON VISUAL OBSERVATIONS.
- 3. ESTIMATED GROUND WATER LEVELS INDICATED BY $_\blacktriangledown$; THESE LEVELS ARE ONLY ESTIMATES FROM AVAILABLE DATA AND MAY VARY WITH PRECIPITATION, POROSITY OF THE SOIL, SITE TOPOGRAPHY, ETC.
- 4. REFUSAL AT THE SURFACE OF ROCK, BOULDER, OR OBSTRUCTION IS DEFINED AS AN SPT RESISTANCE OF 100 BLOWS FOR 2 INCHES OR LESS OF PENETRATION.
- 5. THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND AT THE PARTICULAR TIME WHEN DRILLED. SOIL CONDITIONS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS OCCURRING AT THESE BORING LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE IN THE SUBSURFACE SOIL AND GROUND WATER CONDITIONS AT THE BORING LOCATIONS.
- 6. THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES AS OBTAINED FROM THE DRILLING AND SAMPLING OPERATION. SOME VARIATION MAY ALSO BE EXPECTED VERTICALLY BETWEEN SAMPLES TAKEN. THE SOIL PROFILE, WATER LEVEL OBSERVATIONS AND PENETRATION RESISTANCES PRESENTED ON THESE BORING LOGS HAVE BEEN MADE WITH REASONABLE CARE AND ACCURACY AND MUST BE CONSIDERED ONLY AN APPROXIMATE REPRESENTATION OF SUBSURFACE CONDITIONS TO BE ENCOUNTERED AT THE PARTICULAR LOCATION.

7. KEY TO SYMBOLS AND ABBREVIATIONS:

\$ 5+10+15	STANDARD PENETRATION TEST
3T 24/18	2" OR 3" UNDISTURBED TUBE SAMPLE LENGTH PUSHED/RECOVERY (IN INCHES)
PM	PRESSUREMETER TEST (IN REMARKS COLUMN)
do	DITTO
WOW	WATER OBSERVATION WELL
PP	POCKET PENETROMETER READING (TSF)
OVA	ORGANIC VAPOR ANALYZER READING (PPM)

SCHNABEL ENGINEERING ASSOCIATES | Project: ESA UPDATE, REHRIG FACILITY Contract Number: 933083 CONSULTING GEOTECHNICAL ENGINEERS Boring Number: B-1 TEST BORING LOG Sheet: 1 Of 1 Boring Contractor: AYERS & AYERS, INC. Groundwater Observations POWHATAN, VIRGINIA Date Time Depth Casing Caved Boring Foreman: F. ELGIN Drilling Method: 2%" HOLLOW STEM AUGER Encountered 3-18 10:46 Drilling Equipment: CME-45 Completion 3-18 10:49 DRY SEA Representative: G. ATHAS Casing Pulled 3-18 10:57 DRY 6.3 Dates Started: 03/18/93 Completed: 03/18/93 Location: 901 N. LOMBARDY STREET RICHMOND, VIRGINIA Ground Surface Elevation: 97.6 ± DEPTH STRATA CLASS. SAMPLING ELEV. STRA-REMARKS (FT.) DESCRIPTION (FT.) DEPTH TUM DATA (%) FAT CLAY WITH SAND FILL, TRACE 3+2+10 FILL PID = 0 PPM GRAVEL, MOIST - RED-BROWN 95.6 FILL Α 3+3+2 PID = 0 PPMFINE TO COARSE POORLY GRADED SAND FILL, MOIST - BROWN FILL 9+9+7 PID = O PPMdo, CONTAINS ASHPALT - 5 -6.0 91.6 PID = 0 PPMFINE TO MEDIUM SANDY LEAN CLAY (CL) CL MOIST - BROWN PLEISTOCENE 3+5+8 TERRACE do, BROWN, RED AND GRAY PID = 0.4 PPM4+6+8 10.0-87.6 В -10 -PID = 25 PPM5+6+7 15.0-82.6 -15 -BOTTOM OF BORING @ 15.0 FT.

Comments:

¹⁾ BACKFILLED UPON COMPLETION

²⁾ ELEVATIONS ASSUMED WITH TOP OF ADJACENT WALL TO WEST = 100.0.

SCHNABEL ENGINEERING ASSOCIATES | Project: ESA UPDATE, REHRIG FACILITY Contract Number: 933083 CONSULTING GEOTECHNICAL ENGINEERS Boring Number: B-2 TEST BORING LOG Sheet: 1 Of 1 Boring Contractor: AYERS & AYERS, INC. Groundwater Observations POWHATAN, VIRGINIA Date Time Depth Casing Caved Boring Foreman: F. ELGIN 2%" HOLLOW STEM AUGER Drilling Method: Encountered 3-18 DRY Drilling Equipment: CME-45 Completion 3-18 11:24 DRY SEA Representative: G. ATHAS Casing Pulled 3-18 11:30 DRY _ 7.1 Dates Started: 03/18/93 Completed: 03/18/93 901 N. LOMBARDY STREET Location: RICHMOND, VIRGIIA Ground Surface Elevation: 97.5 ± DEPTH CLASS. ELEV. STRA-SAMPLING REMARKS (FT.) DESCRIPTION (FT.) TUM DEPTH DATA (%) FINE TO MEDIUM SANDY LEAN CLAY 7+9+6 PID = 0 PPMFILL, CONTAINS GRAVEL AND ASPHALT, FILL MOIST - BROWN AND BLACK do, RED PID = 0 PPMΑ 2+3+4 PID = 0 PP, 3+3+4 - 5 6.0 -91.5 PID = 0 PPMFINE SANDY LEAN CLAY (CL), MOIST -CLBROWN AND RED **PLEISTOCENE** 3+5+8 TERRACE PID = 0 PPM4+4+8 do, BROWN, RED AND GRAY В 10 PID = 0 PPM4+5+9 15.0-82.5 -15 BOTTOM OF BORING @ 15.0 FT.

Comments:

- 1) BACKFILLED UPON COMPLETION.
- 2) ELEVATIONS ASSUMED WITH TOP OF ADJACENT WALL TO WEST = 100.0.

HAND AUGER LOG

CONTRACT NO: 933083

HAND AUGER NO: HA-1

PROJECT: ESA UPDATE, REHRIG FACILITY

LOCATION: 901 N. LOMBARDY STREET RICHMOND, VA

SURFACE ELEVATION:

99.6 ±

GROUNDWATER ELEVATION: DRY

EQUIPMENT: HAND AUGER

SEA REPRESENTATIVE: DOMINIQUE SNYDER

DATE: 2-23-93

TIME: 11:40 AM

			DATE: 2-23-93	E: 11:40 AM
DEPTH	ELEVA- TION	STRA- TUM	DESCRIPTION OF SOIL AND OBSERVATIONS	REMARKS
	99.0		FINE TO COARSE SANDY LEAN CLAY FILL, CONTAINS GRASS FRAGMENTS AND ROCK FRAGMENTS, MOIST - BROWN, RED	TWO INCH BRICK PAVERS OVER GROUND SURFACE
-		A	do, TRACE GRAVEL	FILL
•	98.0			
-	97.0			SAMPLE TAKEN FROM 3 - 3.5 FT
-				
-3.5			HAND AUGER TERMINATED AT 3.5 FT	ASSUMED SURFACE ELEVATION RELATIVE TO
-				NEAREST EXIT DOOR THRESHOLD = 100.0
- ,				
		And the second s		

HAND AUGER LOG

CONTRACT NO: 933083

HAND AUGER NO: HA-2

PROJECT: ESA UPDATE, REHRIG FACILITY

LOCATION: 901 N. LOMBARDY STREET RICHMOND, VA

SURFACE ELEVATION: 96.8 ±

GROUNDWATER ELEVATION: DRY

EQUIPMENT: HAND AUGER

SEA REPRESENTATIVE: DOMINIQUE SNYDER

DATE: 2-23-93

			DATE: 2-23-93 TII	ME: 10:05 AM
DEPTH	ELEVA- TION	STRA- TUM	DESCRIPTION OF SOIL AND OBSERVATIONS	REMARKS
			CONCRETE SLAB	FILL
-0.5 0.7		A	CRUSHED STONE FILL, MOIST - GRAY	-
-	96.0	В	LEAN CLAY (CL), TRACE SAND, MOIST - RED BROWN	SAMPLE TAKEN FROM 0.7 TO 1.2 FT
-1.5			HAND AUGER TERMINATED AT 1.5 FT	
			TOTAL ACCEPTED WHITE AT THE T	ELEVATION REFERENCED
				TO ELEVATED WALKWAY
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HAND AUGER LOG

CONTRACT NO: 933083

HAND AUGER NO: HA-3

PROJECT: ESA UPDATE, REHRIG FACILITY

LOCATION: 901 N. LOMBARDY STREET RICHMOND, VA

SURFACE ELEVATION:

 $96.5 \pm$

GROUNDWATER ELEVATION: DRY

EQUIPMENT: HAND AUGER

SEA REPRESENTATIVE: DOMINIQUE SNYDER

DATE: 2-23-93

TIME: 10:30 AM

DATE: 2-25-95 TIME: 10:30 AM			11112: 10:00 / 111	
DEPTH	ELEVA- TION	STRA- TUM	DESCRIPTION OF SOIL AND OBSERVATIONS	REMARKS
			CONCRETE SLAB	
-0.5	96.0	A	CRUSHED STONE FILL, MOIST - GRAY	FILL
0.8 -			FINE TO MEDIUM POORLY GRADED SAND, PROBABLE FILL,	PROBABLE FILL
	95.0		MOIST - YELLOW TO BROWN	SAMPLE TAKEN FROM 0.8
-1.5			HAND AUGER TERMINATED AT 1.5 FT	TO 1.5 FT
_				ELEVATION REFERENCED
				TO ELEVATED WALKWAY
				(ASSUMED EL 100)
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NAME OF THE PARTY	***************************************	MProfesiona		

HAND AUGER LOG

CONTRACT NO: 933083 HAND AUGER NO: HA-4

PROJECT: ESA UPDATE, REHRIG FACILITY

LOCATION: 901 N. LOMBARDY STREET RICHMOND, VA

SURFACE ELEVATION: $95.8 \pm$

GROUNDWATER ELEVATION: DRY

EQUIPMENT: HAND AUGER

SEA REPRESENTATIVE: DOMINIQUE SNYDER

DATE: 2-23-93

TIME: 11:05 AM

			DATE: 2-23-93 TIM	IE: 11:05 AM
DEPTH	ELEVA- TION	STRA- TUM	DESCRIPTION OF SOIL AND OBSERVATIONS	REMARKS
			CONCRETE SLAB	
•		Α		FILL
0.6	95.0		VDOT NO. 57 STONE FILL, MOIST - GRAY	NO SAMPLE TAKEN DUE
-1.0				TO SECOND SLAB
-	-		HAND AUGER TERMINATED AT 1.0 FT DUE TO A SECOND CONCRETE SLAB	
-				ELEVATION REFERENCED
				TO ELEVATED WALKWAY
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HAND AUGER LOG

CONTRACT NO: 933083

HAND AUGER NO: HA-5

PROJECT: ESA UPDATE, REHRIG FACILITY

LOCATION: 901 N. LOMBARDY STREET RICHMOND, VA

SURFACE ELEVATION: 103.5 ±

GROUNDWATER ELEVATION: DRY

EQUIPMENT: HAND AUGER

SEA REPRESENTATIVE: DOMINIQUE SNYDER

DATE: 2-23-03

			DATE: 2-23-93	TIME: 12:45 PM
DEPTH	ELEVA- TION	STRA- TUM	DESCRIPTION OF SOIL AND OBSERVATIONS	REMARKS
	103.0	A	CONCRETE SLAB	FiLL
-0.5 0.7	105.0	В	LEAN CLAY (CL) WITH SAND, MOIST - RED BROWN	SAMPLE TAKEN FROM 0.7
-1.0			FINE TO MEDIUM CLAYEY SAND (SC), MOIST - BROWN	TO 1.0 FT
	·		HAND AUGER TERMINATED AT 1.0 FT	
				ELEVATION REFERENCED
				TO ELEVATED WALKWAY
				(ASSUMED EL 100)
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HAND AUGER LOG

CONTRACT NO: 933083 HAND AUGER NO: HA-6

PROJECT: ESA UPDATE, REHRIG FACILITY

LOCATION: 901 N. LOMBARDY STREET RICHMOND, VA

SURFACE ELEVATION: 103.6 ±

GROUNDWATER ELEVATION: DRY

EQUIPMENT: HAND AUGER

SEA REPRESENTATIVE: DOMINIQUE SNYDER

DATE: 2-23-93 TIME: 1:30 PM

		ME: 1:30 PM		
DEPTH	ELEVA- TION	STRA- TUM	DESCRIPTION OF SOIL AND OBSERVATIONS	REMARKS
-0.5		A	CONCRETE SLAB	FILL
-0.5	103.0	В	FINE TO MEDIUM CLAYEY SAND (SC), MOIST - RED BROWN	SAMPLE TAKEN FROM
1.2				0.7 TO 1.2 FT
-			HAND AUGER TERMINATED AT 1.2 FT	
-				ELEVATION REFERENCED
-				TO ELEVATED WALKWAY (ASSUMED EL 100)
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APPENDIX B

PROTOCOL FOR INSTALLING BORINGS AND HAND AUGER PROBES

PROTOCOL FOR INSTALLING BORINGS/HAND AUGER PROBES

I. DRILLING METHODS AND PROCEDURE

Drilling and sampling was performed using a 2 1/4 inch I.D., hollow-stem auger drill and split-barrel (spoon) soil sampling device.

- A. Borehole locations were marked by Schnabel Environmental prior to mobilizing the drilling equipment. Authorization to drill at any specific location was made by the owner prior to drilling.
- B. All materials were decontaminated prior to their use. Hollowstem augers were advanced in maximum increments of five feet below the ground surface where split-spoon soil samples were collected. The auger plug and sampler were removed and cleaned at each sampling interval.
- C. A standard steel split-spoon sampler was lowered through the auger stem and a soil sample was obtained using American Society of Testing and Materials (ASTM) procedures designated ASTM D-1586. The split-spoon soil samples were examined and described, and the visual sample classifications were recorded on a boring log. The Unified Soil Classification System, ASTM D-2487-83 with additional descriptive terms was used for visual sample classifications.

Duplicate samples were placed in a glass bottles immediately after sample recovery and labeled as to the date of boring, boring number, blow counts, sample number and sample depth. The samples were then placed in a cooler and kept on ice until delivery to the test laboratory. Delivery was made within 24 hours of sampling.

II. HAND AUGER METHODS AND PROCEDURE

Hand auger probes were performed using 2 1/2 inch bucket hand auger.

- A. Hand auger locations were marked by Schnabel Environmental prior to sampling. Authorization to perform hand auger probes at any specific location was made by the owner prior to sampling.
- B. The hand auger bucket was decontaminated prior to use. The hand auger was advanced in maximum measurements of one-half foot below the ground surface where samples were collected. The hand auger bucket was cleaned and decontaminated between hand auger locations.

C. Visual classification and a description of each soil sample was recorded on a hand auger log. Each sample was placed in a jar immediately after recovery and labeled with the date of the probe, hand auger identification number, and sample depth. The samples were placed in a cooler and kept on ice until delivery to the testing laboratory. Delivery was made within 24 hours of sampling.

III. QUALITY ASSURANCE/QUALITY CONTROL

Decontamination:

A strict quality assurance/quality control (QA/QC) procedure was followed for thorough decontamination of the materials prior to their use. The drill rig and drilling equipment, including auger flights, drill rods, plug, split-spoon sampler, tremie pipes, etc. were steam cleaned prior to moving onto the boring location. In addition, appropriate components of the drill rig were steam cleaned prior to the start of the job.

The decontamination procedure for split-spoon samplers and hand augers included either steam cleaning or a combination of a detergent scrub, tap water rinse, and a final deionized water rinse.

APPENDIX C

LABORATORY CERTIFICATES OF ANALYSIS CHAIN OF CUSTODY

SERVICES

30X 286 A ROUTE 4, BOX 286 A (RT. 1 & OLD KEETON RD.) ETON RD.) VA 23060 GLEN ALLEN, VA 23060

(804) 550-3971 FAX 550-3826

550-3826

Certificate of Analysis

933083 No.:

Name: ESA Update, Rehrig Facility

ed By : Russell S. Harris, Jr.

March 18, 1993 ceived: March 30, 1993 issued:

ice Method: SW-846

.1 sample labeled HA-1 (3-3.5 ft.) was analyzed for the following B-2

letals:

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3

DLHA-1 (3-3.5 ft.) mg/kg mg/kg 3.5 3.9 6.0 13.5

ice Method: MCAWW Method 150.1

il sample labeled HA-1 (3-3.5 ft.) was analyzed for pH.

HA-1 (3-3.5 ft.) 4.61

the

ace Method: MCAWW Method 375.1

il sample labeled HA-1 (3-3.5 ft.) was analyzed for Sulfate.

HA-1 (3-3.5 ft.) mg/kg

5.0 ion Limit

3elow Detection Limit

cory Manager

40R



ROUTE 4, BOX 286 A

(RT. 1 & OLD KEETON RD.)

GLEN ALLEN, VA 23060

(804) 550-3971 FAX 550-3826

Certificate of Analysis

Project No. : V933083

Project Name: ESA Update, Rehrig International

Submitted By: Russell S. Harris, Jr.

Date Received:

Date Reissued:

February 23, 1993 April 2, 1993

Reference Method: SW-846 Method 9045

Four soil samples labeled HA-2, HA-3, HA-5, and HA-6 were analyzed for

pH:

Sample	ID	_H_
HA-2		6.50
HA-3		9.05
HA-5		8.29
HA-6		7.58

Reference Method: SW-846 Method 7521

Four soil samples labeled HA-2, HA-3, HA-5, and HA-6 were analyzed Total Nickel.

	Total Nickel
Sample ID	mg/kg
HA-2	7.0
HA-3	18.2
HA-5	24.4
HA-6	66.5
Detection Limit	3.5
zeequesta ziziiz	0.0

BDL = Below Detection Limit

Carmela Tombes

Laboratory Manager

93023297R

LABORATORIES, INC.

ROUTE 4, BOX 286 A

(RT. 1 & OLD KEETON RD.)

GLEN ALLEN, VA 23060

(804) 550-3971 FAX 550-3826

Certificate of Analysis

Project No. : V933083

Project Name :

ESA Update, Rehrig International

Submitted By : Russell S. Harris, Jr.

Date Received: February 23, 1993

Date Reissued: April 2, 1993

Reference Method: SW-846

Four soil samples labeled HA-2, HA-3, HA-5, and HA-6 were analyzed TCLP Nickel and Chromium by TCLP Extraction Method 1311.

	TCLP Nickel	TCLP Chromium
Sample ID	mg/l	mg/1
HA-2	BDL	\mathtt{BDL}
HA-3	BDL	BDL
HA-5	BDL	BDL
HA-6	BDL	BDL
Detection Limit	0.14	0.5

Reference Method: MCAWW Method 375.4

Four soil samples labeled HA-2, HA-3, HA-5, and HA-6 were analyzed for Sulfates.

	Sulfates
Sample ID	<u>mg/kg</u>
HA-2	115.4
HA-3	84.6
HA-5	130.8
HA-6	169.2
1	

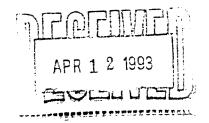
Detection Limit 5.0

BDL = Below Detection Limit

Carmela Tombes

Laboratory Manager

93023297R



CHAIN OF CUSTODY

to

client: Schnobel Environmada / Services

NviroCompliance Laboratories, Inc.
Maple Leaf Court (804)550-3971
Ihland, Virginia 23005

3297 Received by: (Signature) Received by: (Signature) Russell S. Hamis, Jr. 649-7035 Fax: Pedinos 1 Submit to :_ Address LAB USE ONE.Y Phone 8 ₹ Cta Dete Date .. ۲. 17. તં 12. ŭ 7. 16. 8 m 4 'n ø œ ٥. 6. 5. ₩. 19. Ë Relinquished by: (Signature) Relinquished by: (Signature) 2-23-93 8:15pm ANALYSES 1991 (Yearly 1491 (Yearly 1991 (Yearly Ŕ উ **玩** 00 = + Signature) Received for Lab by: SAMPLE IDENTIFICATION PROJECT NAME: ESA Update , Retiry International (Print) 5:48 Time 2/23/93 COMP GRAB Date Relinquished by: (Signature) Relinquished by: (Signature) (elimpuished by: (Signature) TIME MANPLERS: (Signatures) 2/23 DATE 212 2/2 2/23 1933083 ROJECT NO. 14.5 9-4 STATION

Wallater SwSoil OwOrganic AqwAqueous SlasLudge Fafilter MaMisc.

CHA. JF CLTOL

ð Page .

occampliance Laboratories, Inc. Box 286A (804)550-3971 Allen, Virginia 23060

client: Schrabel Ehrstenmantal
submit to: Resell Silvernis, Dr.

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33083		CS.A	Solute	, Foh	FROJEL HAME, Fohny Facilly	71	*		ANALYSES	-	Address :	1		
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1 3/18	8,		\	2.	B-1	(4-5.54)	J.R	X			2.			
1/3/18	as as			3.) 1-a	13,5-15.0 ft	7.7%	×			3.			
2 3/	3//2			. 1	13-51	(4-5.5 4+)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	X			4.			
77	3/16			5.	28	(++ 0.21-2,E1)	200	X			5.		- AND	
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inquishe	(inquished by: (Signature)	nature)	Date	F	Time	Received by: (Sighature)	9	Reli	Relinquished by: (Signature)	gnature)	Date	Time Received	Received by: (Signature)	ture)
Limpuishe	Linquished by: (Signature)	nature)	Date	F	Time	Received for Lab by:		Date	Time	3	LAB USE ONLY		[9]	LOT NO.

=Water S=Soil O=Organic Aq=Aqueous Sl=Sludge F=Filter M=Misc.



<u>Parameter</u>

TPH

Certificate of Analysis

10357 Old Keeton Road Glen Allen, Virginia 23059 Phone 804 • 550 • 3971 Fax 804 • 550 • 3826

Rehrig Facility December 01, 1999 December 01, 1999 Project Name : Daté Received: Date Sampled:

10:52 Time Sampled:

December 08, 1999 Date Issued

Attn: Russ Harris 1 West Cary Street Richmond, VA 23220 Tool & Die Shop, 2 Gas Bottles in Area (Stored)
Date/Time Date/Ti Date/Time Lab # 1/Sample ID Analyzed Method Analyst Prepared DL12-08/1006 418.1 Units Result 12-07/1526 25.0 Parameter mg/kg BDL TPH Tool & Die Shop, 2 Gas Bottles in Area (Stored) Date/Time
Analyzed Method
12-08/1006 418.1 Date/Time Lab # 2/Sample ID Analyst Prepared AEM Units Result 12-07/1526 <u>Parameter</u> TPH 25.0 mg/kg BDL :*32 Between Machine Shop and Tool & Die Shop Date/Time
Analyzed Method Analyst
12-08/1006 418.1 AEM Lab # 3/Sample ID Date/Time Prepared DL Units Result 12-07/1526 25.0

mg/kg

BDL = Below Detection Limit

Emile T. Shaw Laboratory Manager

R9C31581-1/5



10357 Old Keeton Road Glen Allen, Virginia 23059 Phone 804 • 550 • 3971 Fax 804 • 550 • 3826

Method

12-06/1207 8260B 12-06/1207 8260B 12-06/1207 8260B

12-06/1207 8260B 12-06/1207 8260B

12-06/1207 8260B

12-06/1207 8260B

12-06/1207 8260B 12-06/1207 8260B

KOD

KOD

KOD

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Analyst

KOD

LABORATORIES, INC. Schnabel Environmental Svcs. Attn: Russ Harris 1 West Cary Street Richmond, VA 23220

Rehrig Facility December 01, 1999 December 01, 1999 Project Name : Date Received: Date Sampled: 11:55 December 08, 1999 Time Sampled: Date Issued :

12-06/1128 12-06/1128 12-06/1128

12-06/1128

12-06/1128

12-06/1128 12-06/1128

12-06/1128

12-06/1128

12-06/1128

Date/Time

Date/Time

Analyzed Tool Wash 12-06/1207 8260B 12-06/1207 8260B <u>Prepared</u> Lab # 6/Sample ID KOD 12-06/1128 DL Units KOD Result 12-06/1207 8260B 20.0 12-06/1128 ug/kg 12-06/1207 8260B KOD 12-06/1128 BDL 20.0 ug/kg <u>Parameter</u> 12-06/1207 8260B KOD Chloromethane 12-06/1128 BDL 20.0 ug/kg 12-06/1128 12-06/1128 KOD 12-06/1207 8260B Bromomethane BDL 20.0 ug/kg KOD 12-06/1207 8260B 12-06/1207 8260B Vinyl chloride BDL 20.0 ug/kg ug/kg Dichlorodifluoromethane KOD BDL 20.0 12-06/1128 KOD 50.0 12-06/1128 12-06/1128 12-06/1207 8260B BDL Chloroethane Methylene chloride ug/kg 12-06/1207 8260B BDL KOD 5.0 ug/kg 12-06/1207 8260B 12-06/1207 8260B KOD BDL 5.0 12-06/1128 ug/kg Acetone Carbon disulfide KOD 5.0 BDL 12-06/1128 Trichlorofluoromethane ug/kg KOD 12-06/1207 8260B BDL 5.0 12-06/1128 12-06/1128 ug/kg 1,1-Dichloroethene KOD 12-06/1207 8260B 5.0 BDL ug/kg Bromochloromethane KOD 12-06/1207 8260B 12-06/1207 8260B BDL 5.0 12-06/1128 ug/kg 1,1-Dichloroethane KOD BDL 5.0 12-06/1128 c-1,2-Dichloroethene ug/kg 12-06/1128 12-06/1128 12-06/1128 12-06/1207 8260B KOD 5.0 BDL ug/kg t-1,2-Dichloroethene KOD 12-06/1207 8260B 12-06/1207 8260B BDL 5.0 ug/kg KOD BDL 5.0 Chloroform ug/kg 2,2-Dichloropropane 12-06/1207 8260B KOD 12-06/1128 12-06/1128 50.0 BDL ug/kg 1,1,1-Trichloroethane KOD 12-06/1207 8260B 12-06/1207 8260B BDL 5.0 ug/kg KOD 2-Butanone (MEK) 12-06/1128 BDL 5.0 ug/kg 1,2-Dichloroethane KOD 12-06/1128 12-06/1128 12-06/1207 8260B BDL 5.0 ug/kg 12-06/1207 8260B KOD Dibromomethane BDL 5.0 ug/kg Carbon tetrachloride KOD 12-06/1207 8260B 5.0 12-06/1128 BDL ug/kg Bromodichloromethane KOD 12-06/1128 12-06/1128 BDL 5.0 12-06/1207 8260B 1,2-Dichloropropane ug/kg KOD 5.0 12-06/1207 8260B BDL ug/kg 1,3-Dichloropropane KOD 12-06/1207 8260B 12-06/1207 8260B BDL 5.0 12-06/1128 ug/kg KOD Trichloroethene BDL 5.0 12-06/1128 ug/kg KOD 12-06/1207 8260B 5.0 12-06/1128 BDL ug/kģ Dibromochloromethane KOD 12-06/1207 8260B 12-06/1207 8260B BDL 5.0 c-1,3-Dichloropropene ug/kg KOD BDL 5.0 12-06/1128 ug/kg t-1,3-Dichloropropene KOD 12-06/1207 8260B 12-06/1207 8260B 5.0 12-06/1128 12-06/1128 BDL 1,1,2-Trichloroethane ug/kg KOD BDL 5.0 ug/kg KOD 1,2-Dibromoethane 12-06/1207 8260B 12-06/1128 BDL 50.0 ug/kg 12-06/1207 8260B KOD 50.0 12-06/1128 12-06/1128 BDL ug/kg Toluene 4-Methyl-2-pentanone KOD BDL 5.0 12-06/1207 8260B

ug/kg

5.0

5.0

5.0

5.0

5.0

5.0

5.0

5.0

5.0

5.0

10.0

BDL

Wile T. Shaw Emile Laboratory Manager R9C31581-4/5

1,1,1,2-Tetrachloroethane

1,2,3-Trichloropropane

1,1,2,2-Tetrachloroethane

BDL = Below Detection Limit

1,1-Dichloropropene

Tetrachloroethene

xylenes (total)

Isopropylbenzene

Chlorobenzene

Bromobenzene

Ethylbenzene

styrene

2-Hexanone



10357 Old Keeton Road Glen Allen, Virginia 23059 Phone 804 • 550 • 3971 Fax 804 • 550 • 3826

Rehrig Facility December 01, 1999 December 01, 1999 Project Name : Date Received: Date Sampled:

11:55 Time Sampled: 11:55
Date Issued: December 08, 1999

Attn: Russ Harris 1 West Cary Street Richmond, VA 23220 #3

	Tool Wash				Data /mimo	
Lab # 6/Sample ID	. 1001 //4211			Date/Time	Date/Time Analyzed Method	Analyst
_	Result	Units	DL	Prepared	12-06/1207 8260B	KOD
<u>Parameter</u>	BDL	ug/kg	5.0	12-06/1128	12-06/1207 8260B	KOD
t-Butylbenzene	BDL	ug/kg	5.0	12-06/1128	12-06/1207 8260B	KOD
n-Propylbenzene	BDL	ug/kg	5.0	12-06/1128	12-06/1207 8260B	KOD
Hexachlorobutadiene	BDL	ug/kg	5.0	12-06/1128	12-06/1207 8260B	KOD
2-Chlorotoluene	BDL	ug/kg	5.0	12-06/1128	12-06/1207 8260B	KOD
4-Chlorotoluene	BDL	ug/kg	10.0	12-06/1128	12-06/1207 8260B	KOD
s-Butvlbenzene	BDL	ug/kg	10.0	12-06/1128	12-06/1207 8260B	KOD
1 3-Dichlorobenzene	BDL	ug/kg	10.0	12-06/1128	12-06/1207 8260B	
1 2-Dichlorobenzene	BDL	ug/kg	10.0	12-06/1128	12-06/1207 8260B	KOD KOD
1.4-Dichlorobenzene		ug/kg	10.0	12-06/1128	12-06/1207 8260B	
4-Isopropyltoluene	BDL	ug/kg	10.0	12-06/1128	12-06/1207 8260B	KOD
n-Rutvlbenzene	BDL		10.0	12-06/1128	12-06/1207 8260B	KOD
1 3 5-Trimethylbenzene	BDL	ug/kg	10.0	12-06/1128	12-06/1207 8260B	KOD
1 2 A-Trimethylbenzene	ביטם	ug/kg	10.0	12-06/1128	12-06/1207 8260B	KOD
1 2 4-Trichloropenzene	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ug/kg	10.0	12-06/1128	12-06/1207 8260B	KOD
1,2,3-Trichlorobenzene	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ug/kg	10.0	12-06/1128	12-06/1207 8260B	KOD
Naphthalene	BDL	ug/kg	10.0	12 00/11	•	
Naphenarone	sdo.		:-+	re Spot Welde	ers	
Lab # 7/Sample ID	: Bending Mach	nine & R	esistan	Date/Time	Date/Time	
Lab # // Damp-			n. T	Prepared	Analyzed Method	Analyst
Parameter	Result	Units	DL_	12-07/1526	12-08/1006 418.1	AEM
TPH	BDL	mg/kg	25.0	12-01/1320	22 00/200	
IPn	47					
Lab # 8/Sample ID	: Dumpster Are	ea		Date/Time	Date/Time	
Lab # 8/Sample 10				Date/IIme	Analyzed Method	Analyst
B	Result	Units	DL	Prepared 12-07/1526	12-08/1006 418.1	AEM
Parameter	BDL	mg/kg	25.0	12-07/1520	12 00/1000 1241	
TPH	B	_				
Lab # 9/Sample ID	:# Gas Bottles				Date/Time	
Lab $\#$ 9/Sample 10				Date/Time	Analyzed Method	Analyst
	Result	Units	DL	Prepared	12-08/1006 418.1	AEM
Parameter	28.7	mg/kg	25.0	12-07/1526	12-06/1000 410:1	
TPH '	:#9 Dumpster Are	3, 3				
	: Dumpster Are	ea		· ·	n-t-/mimo	
Lab # 10/Sample ID	. Dumpbeer	-		Date/Time	Date/Time	Analyst
	Result	Units	DL	Prepared	Analyzed Method	AEM
Parameter	BDL	mg/kg	25.0	12-07/1526	12-08/1006 418.1	111111
TPH	בעם	979				
	BIO Dumpetor Are					
Lab # 11/Sample ID	:#1 Dumpster Are	= u		Date/Time	Date/Time	7 1 +
· -	D7+	Units	DL	Prepared	Analyzed Method	Analyst
Parameter	Result	mg/kg	12.50	12-02/0948	12-06/1618 7520	CMG
Nickel	BDL		6.25	12-02/0948	12-06/1452 7190	CMG
Chromium	10.03	mg/kg	0.20			

BDL = Below Detection Limit

Emile T. Shaw Laboratory Manager

R9C31581-5/5



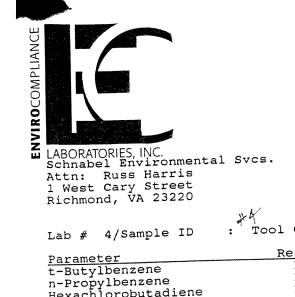
10357 Old Keeton Road Glen Allen, Virginia 23059 Phone 804 • 550 • 3971 Fax 804 • 550 • 3826

LABORATORIES, INC. Schnabel Environmental Svcs. Attn: Russ Harris 1 West Cary Street Richmond, VA 23220

Project Name:
Date Received:
Date Sampled:
Time Sampled:
Date Issued:
Rehrig Facility
December 01, 1999
December 01, 1999
December 08, 1999

1 West Cary Street 1 West Cary Street 2 VA 23220		Date Iss	5ueu -
1 West Cary 23220 Richmond, VA 23220			Date/Time Date/Time Method Analyst
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Demamoter	BDL	49/15	10-06/1140 == -c/1207 8260P
<u>parameter</u> <u>abloromethane</u>	BDL	19/kg 20.0	12-06/1128 12-06/1207 8260B KOD 12-06/1128 12-06/1207 8260B KOD 12-06/1128 12-06/1207 8260B KOD
omornalie	BDL	ug/kg 20.0	12-06/1128 12-06/1207 8260B KOD
Vinyl chloride Vinyl rdifluoromethane	BDL	ug/kg 20.0	12-06/1128 12-06/1207 8260B KOD
n: ahlorodittuo-	BDL BDL	ua/kg = 20.0	
Chloroethane Chloride	BDL	ug/kg	12-06/11/20 12 22/1207 82608
Methylene Children	BDL	ug/kg 5.0	12-06/11/20 12 02/1207 82609
Acetone	BDL	ug/kg 3.0	12-06/1128 12-06/1207 8260B KOD 12-06/1128 12-06/1207 8260B KOD
Carbon disulfide Trichlorofluoromethane Trichloroethene	BDL	160 5.0	
	BDL	ug/kg 5.0	12-06/1128 12-06/1207 8260B KOD
1,1-Dichloromethane Bromochloromethane	BDL	19/kg 5.0	12-06/1128 12-06/1207 8260B KOD
Bromochloroethane 1,1-Dichloroethene	BDL	ug/kg	12-06/1128 12-06/1207 8260B KOD
1,1-Dichloroethene c-1,2-Dichloroethene	BDL BDL	ug/kg	12-06/1128 12-06/1207 8260B KOD 12-06/1128 12-06/1207 8260B KOD
t-1,2-D1011102	BDT	ug/kg	
Chlorololiii	BDL	ua/kg	12-06/11/20 10 20/1207 82600
	BDL	44/19 - 0	12-06/11/20 22/1207 82009
1,1,1-11110MEK) 2-Butanone (MEK) 2-Butanone thane	BDL	ug/kg 5.0	
	BDL	ug/kg 5.0	12-06/1128 12-06/1207 8260B KOD
Dibromomethane Dibromomethane	BDL	ug/kg 5.0	12-06/1128 12-06/1207 8260B KOD
Dibromomethane Carbon tetrachloride Carbon tetrachloride	BDL BDL	ug/kg 5.0	12-06/11/20 12 06/1207 82608
Carbon tetrachiane Bromodichloromethane Bromodichloropropane	BDL	ug/kg	12-06/1128 12-06/1207 8260B KOD 12-06/1128 12-06/1207 8260B KOD
Bromodichiloropropane 1,2-Dichloropropane	BDL	na/ka 5.0	10-06/1140 14 12/1207 8260B 10-1
	BDL	ug/kg	
Trichloroecho	BDL	ug/kg = 0	
Benzene Dibromochloromethane Dibromochloropropene	BDL	uu/ 29 _ 2	
Dibromochloropropene c-1,3-Dichloropropene	BDL	ug/kg 5.0	12-06/1128 12-06/1207 8260B KOD
c-1,3-Dichloropropene t-1,3-Dichloropropene	BDL	ug/kg 5.0	12-06/1128 12-06/1207 8260B KOD
t-1,3-Dichlorophopen 1,1,2-Trichloroethane 1,1,2-bromoethane	BDL	ug/kg 5.0	12-06/1128 12-06/1207 8260B KOD 12-06/1128 12-06/1207 8260B KOD
1,2-0101011001	BDL BDL	ug/kg 50.0	12-06/1128 12-06/1207 8260B KOD 12-06/1128 12-06/1207 8260B KOD
Toluene Toluene	BDL	ug/kg 50.2	12-06/1128 12-06/1207 8260B KOD 12-06/1128 12-06/1207 8260B KOD
1_Met.hv1=2=P0	BDL	ug/kg 5.5	0 12-06/1128 12-06/1207 8260B KOD 12-06/1128 12-06/1207 8260B KOD
o_uexanone	BDL	5.0	12-06/1140 == 06/1207 82009
Bromoform 1,1,2-Tetrachloroethane 2,1,1,2-Tetrachloropene	BDL	49/150 5.0	
1,1,1,2-letropropene 1,1-Dichloropropene	BDL	ug/kg 5.0	0 12-06/1128 12-06/1207 8260B KOD
mat rachitotoo.	BDL	ug/kg 5.	0 12-06/1128 12-06/1207 8260B KOD
~!- 1 ~~ O D D !! 4 C ! ! C	BDL	ug/kg 2.	3 10-06/11/0 14 1-7/1007 876UB
Rthylbenzene	BDL BDL	ua/kg +u.	10-06/11/20 +4 12/11/07 82/00
Styrene	BDL	ug/kg 2.	.0 12-06/1128 12-06/1207 8260B KOD .0 12-06/1128 12-06/1207 8260B KOD
virlenes (Louis)	BDL	ua/kg 2.	
1,2,3-Trichloropropand 1,2,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane	BDL	ua/kg 2.	.0 12-06/1128 12-06/1207 01 .0 12-06/1128
1,1,2,2 Teo2	BDL	1107/64	
	t		
Isopropylbenzene BDL = Below Detection Limit			
7			

Emile T. Shaw Laboratory Manager R9C31581-2/5



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Project Name: Rehrig Facility
Date Received: December 01, 1999
Date Sampled: December 01, 1999
Time Sampled: 11:30
Date Issued: December 08, 1999

: Tool Cleanup Station

Lab # 4/Sample ID	: "	Tool Cleanup	Station	ı	Date/Time	Date/Time	Analyst
		Result	Units	DL	Prepared	Analyzed Method	
Parameter t-Butylbenzene n-Propylbenzene Hexachlorobutadiene 2-Chlorotoluene 4-Chlorotoluene s-Butylbenzene 1,3-Dichlorobenzene 1,2-Dichlorobenzene 1,4-Dichlorobenzene 4-Isopropyltoluene n-Butylbenzene 1,3,5-Trimethylbenzen 1,2,4-Trichlorobenzen 1,2,4-Trichlorobenzen	e e	Result BDL BDL BDL BDL BDL BDL BDL BD	ug/kg	5.0 5.0 5.0 5.0 10.0 10.0 10.0 10.0 10.0	12-06/1128 12-06/1128 12-06/1128 12-06/1128 12-06/1128 12-06/1128 12-06/1128 12-06/1128 12-06/1128 12-06/1128 12-06/1128 12-06/1128 12-06/1128 12-06/1128 12-06/1128	12-06/1207 8260B 12-06/1207 8260B	KOD KOD KOD KOD KOD KOD KOD KOD KOD KOD
Naphthalene	#5						
Lab # 5/Sample ID	:	Wire Storage		DL	Date/Time Prepared	Date/Time Analyzed Method	Analyst
Parameter TPH		Result BDL	Units mg/kg	25.0	12-07/1526	12-08/1006 418.1	AEM

BDL = Below Detection Limit

Emile T. Shaw Laboratory Manager

R9C31581-3/5



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Schnabel Environmental Svcs.

Attn: Russ Harris 1 West Cary Street Richmond, VA 23220 Project No. : 993619

Project Name : Rehrig Facility Date Received: December 06, 1999
Date Sampled: December 02, 1999

Time Sampled: 11:35

Date Issued : December 14, 1999

Lab # 2/Sample ID

cool Cleaning Station

Lab # 2/Sample ID :	cool Cleani	ng Stati	on	/m!	Date/Time	
	•			Date/Time	Analyzed Method	Analyst
Parameter	Result	Units	DL	Prepared		KOD
Chloromethane	BDL	ug/kg	20.0	12-13/1056	12-13/1056 8260B	KOD
Bromomethane	BDL	ug/kg	20.0	12-13/1056	12-13/1056 8260B	KOD
Vinyl chloride	BDL	ug/kg	20.0	12-13/1056	12-13/1056 8260B	KOD
Dichlorodifluoromethane	BDL	ug/kg	20.0	12-13/1056	12-13/1056 8260B	KOD
Chloroethane	BDL	ug/kg	20.0	12-13/1056	12-13/1056 8260B	KOD
Methylene chloride	BDL	ug/kg	20.0	12-13/1056	12-13/1056 8260B	KOD
Acetone	BDL	ug/kg	50.0	12-13/1056	12-13/1056 8260B	KOD
Carbon disulfide	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
Trichlorofluoromethane	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
1,1-Dichloroethene	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
Bromochloromethane	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
1,1-Dichloroethane	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
c-1,2-Dichloroethene	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
t-1,2-Dichloroethene	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
Chloroform	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
2,2-Dichloropropane	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	
1,1,1-Trichloroethane	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
	BDL	ug/kg	50.0	12-13/1056	12-13/1056 8260B	KOD
2-Butanone (MEK) 1,2-Dichloroethane	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
Dibromomethane	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
Carbon tetrachloride	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
Bromodichloromethane	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
1,2-Dichloropropane	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
1,3-Dichloropropane	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
Trichloroethene (TCE)	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
Benzene	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
Dibromochloromethane	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
c-1,3-Dichloropropene	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
t-1,3-Dichloropropene	BDL	ug/kg	5.0	12-13/1056	12-13/1056 8260B	KOD
1,1,2-Trichloroethane	חתם	49/19	0	,		

Emile T. Shaw

Laboratory Manager

BDL = Below Detection Limit

R9C31646-1/7

ENVIROCOMPLIAIN

Certificate of Analysis

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LABORATORIES, INC.

Schnabel Environmental Svcs.

Attn: Russ Harris 1 West Cary Street Richmond, VA 23220 project No. : 993619

Project Name : Rehrig Facility Date Received: December 06, 1999 Date Sampled: December 02, 1999

Time Sampled: 11:47

Date Issued : December 14, 1999

** Fool Cleaning Station

,	Fool Cleaning	, Station			alyst
Lab # 2/Sample ID :	Result	Units DL	<u>Prepared</u> 12-13/1056	12-13/1056 8260B	KOD
Parameter 1,2-Dibromoethane Toluene 4-Methyl-2-pentanone 2-Hexanone Bromoform 1,1,1,2-Tetrachloroeth 1,1-Dichloropropene Tetrachloroethene (PCE Chlorobenzene Ethylbenzene Styrene Xylenes (total) 1,2,3-Trichloropropan 1,1,2,2-Tetrachloroet Bromobenzene Isopropylbenzene t-Butylbenzene n-Propylbenzene Hexachlorobutadiene 2-Chlorotoluene 4-Chlorotoluene s-Butylbenzene 1,3-Dichlorobenzene 1,2-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Trichlorobenz 1,2,4-Trimethylbenz 1,2,4-Trichlorobenz BDL = Below Detect:	BDL	ug/kg 5.0 ug/kg 5.0 ug/kg 50.0 ug/kg 50.0 ug/kg 5.0 ug/kg 10.0	12-13/1056 12-13/1066 12-13/	12-13/1056 8260B 12-13/1056 8260B	KOD KOD KOD KOD KOD KOD KOD KOD

Emile T. Shaw Laboratory Manager

R9C31646-2/7



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Schnabel Environmental Svcs.

Attn: Russ Harris 1 West Cary Street Richmond, VA 23220 Project No. : 993619

Project Name : Rehrig Facility Date Received: December 06, 1999 Date Sampled: December 02, 1999

Time Sampled: 11:47

Date Issued : December 14, 1999

Lab # 2/Sample ID

cool Cleaning Station

Lab # 2/Sample ID :	4001 0104112			Date/Time	Date/Time	
	Result	Units	DL	Prepared	Analyzed Method	Analyst
<u>Parameter</u> 1,2,3-Trichlorobenzene	BDL	ug/kg	10.0		12-13/1056 8260B 12-13/1056 8260B	
Naphthalene	BDL	ug/kg	10.0	12 15/1000	 //	

18Chemical Storage for Plating Lab # 3/Sample ID

Lab # 3/Sample ID	: Chemical St	orage 10	Date/Time			
Edz " ,				Date/Time		
	Result	Units	DL	Prepared	Analyzed Method	Analyst
Parameter				12-09/1500	12-10/1115 7520	CMG
Nickel	BDL	mg/kg	12.50	·		ETS
	7.24	mg/kg	6.25	12-09/1500	12-10/1230 7190	_
Chromium				12-07/1300	12-13/1430 7.3	RLO
Reactivity	Negati	vemg/kg			12-09/1625 7.3/90	110 RT.O
	BDL	mg/kg	25	12-07/1300		
Cyanide			50	12-13/1430	12-13/1430 7.3/90)30 MLC
Sulfide	406	mg/kg	50	•	12-13/1700 1010	ETS
	>60	°C		12-13/1500		_
Ignitability				12-14/1600	12-14/1600 7.2	ISW
Corrosivity	Negati	ve		•	12-14/1600 9040	ISW
	5.4	SU		12-14/1600	12-14/1600 9040	
рН	3					

Solid Haz-Waste Storage Lab # 4/Sample ID

Lab $\#$ 4/Sample ID	: Solid naz-w	asce bec	2490	Date/Time	Date/Time		
	Result	Units	DL	Prepared	Analyzed M	Method	<u>Analyst</u>
<u>Parameter</u>	Result	mg/kg	12.50	12-09/1500	12-10/1115	7520	CMG
Nickel	9.46	mg/kg	6.25	12-09/1500	12-10/1230	7190	ETS
Chromi'um		vemg/kg		12-07/1300	12-13/1430		RLO
Reactivity	Negaci BDL	mg/kg	25	12-07/1300	12-09/1625	7.3/901	O RLO
Cyanide	406	mg/kg	50	12-13/1430	12-13/1430		
Sulfide	>60	°C		12-13/1500	12-13/1700		ETS
Ignitability	Negati	-		12-14/1600	12-14/1600		ISW
Corrosivity	6.5	SÜ		12-14/1600	12-14/1600	9040	ISW
рH	些15						
		hinna					

Lab # 5/Sample ID : Molding Machines

Lab # 5/Sample 1D :	Mording has			Date/Time	Date/Time	
	Result	Units			Analyzed Method	
Parameter TPH		mg/kg	_	12-07/1526	12-08/1006 418.1	AEM

BDL = Below Detection Limit

Emile T. Shaw

Laboratory Manager

R9C31646-3/7



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Schnabel Environmental Svcs.

Attn: Russ Harris 1 West Cary Street Richmond, VA 23220 Project No. : 993619

Project Name : Rehrig Facility Date Received: December 06, 1999 Date Sampled: December 02, 1999

Time Sampled: 12:25

Date Issued : December 14, 1999

Lab # 7/Sample ID

: Acid Storage Area for Tank

Lab # 7/Sample ID	: Actu beorug	C 111 Ou =		Date/Time	Date/Time		
•	Result	Units	DL	Prepared	Analyzed 1	Method 1	Analyst
Parameter	661.51	mg/kg	12.50	12-09/1500	12-10/1115		CMG
Nickel	45.47	mg/kg	6.25	12-09/1500	12-10/1230	7190	ETS
Chromium		vemg/kg		12-07/1300	12-13/1430	7.3	RLO
Reactivity	BDL	mg/kg	25	12-07/1300	12-09/1625	7.3/9010	RLO
Cyanide	430	mg/kg	50	12-13/1430	12-13/1430	7.3/9030) MLC
Sulfide		°C	J0	12-13/1500	12-13/1700		ETS
Ignitability	>60	~		12-14/1600	12-14/1600		ISW
Corrosivity	Negati			12-14/1600	12-14/1600		ISW
рН	6.2	SU		12 14/1000			

\$550

Lab # 8/Sample ID : Liquid Treatment System Filter Press

Lab # 8/Sample ID	: Didara irea	cmene o		Date/Time	Date/Time		
	Result	Units	DL	Prepared	Analyzed N	<u> ethod</u>	Analyst
<u>Parameter</u>	936.29	mg/kg	12.50	12-09/1500	12-10/1115	7520	CMG
Nickel	521.90	mg/kg	6.25	12-09/1500	12-10/1230	7190	ETS
Chromium				12-07/1300	12-13/1430		RLO
Reactivity	-	vemg/kg	25	12-07/1300	12-09/1625		10 RLO
Cyanide	BDL	mg/kg	50	12-13/1430	12-13/1430		
Sulfide	335	mg/kg		12-13/1400	12-13/1700		ETS
'Ignitability	>60	°C		12-14/1600	12-14/1600		ISW
Corrosivity	Negati				12-14/1600		ISW
рН	6.0	SU		12-14/1600	•		
TCLP Chromium	BDL	mg/1	• 5	12-14/1000	12-14/1540	1011/	

Old Plating Line Lab # 9/Sample ID

Lab # 9/Sample ID	: Old Flacing	11110		Date/Time	Date/Time		
T	Result	Units	DL	Prepared	Analyzed M		<u>nalyst</u>
Parameter	BDL	mg/kg	12.50	12-09/1500	12-10/1115		CMG
Nickel	59.32	mg/kg	6.25	12-09/1500	12-10/1230		ETS
Chromium		.vemg/kg			12-13/1430		RLO
Reactivity	BDL	mg/kg	25	12-07/1300	12-09/1625	7.3/9010	RLO
Cyanide	311	ma/ka	50	12-13/1430	12-13/1430	7.3/9030	MLC
Sulfide		°C		12-13/1500			ETS
Ignitability	>60	- C		12 10/1000	/ _		

BDL = Below Detection Limit

Laboratory Manager

R9C31646-4/7



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Schnabel Environmental Svcs.

Attn: Russ Harris 1 West Cary Street Richmond, VA 23220

Project No. : 993619

Project Name: Rehrig Facility
Date Received: December 06, 1999 Date Sampled: December 02, 1999

Time Sampled: 12:25

Date Issued : December 14, 1999

: Old Plating Line Lab # 9/Sample ID

Lab # 9/Bampic 12				Date/Time	Date/Time	
Development	Result	Units	DL	Prepared	Analyzed Method	Analyst
Parameter Corrosivity	Negati				12-14/1600 7.2	ISW
Hq	10.1	SU		12-14/1600	12-14/1600 9040	ISW

#21 : Maint. Storage Lab # 10/Sample ID

Lab # 10/Sample 15	. 11421167 2002	- 5 -		Date/Time	Date/Time		
Parameter	Result	Units	DL	Prepared	Analyzed N	Method I	Analyst
Nickel	BDL	mg/kg	12.50	12-09/1500	12-10/1115	7520	CMG
Chromium	BDL	mg/kg	6.25	12-09/1500	12-10/1230		ETS
Reactivity	Negativ	vemg/kg		12-07/1300	12-13/1430		RLO
Cyanide	BDL	mg/kg	25	12-07/1300	12-09/1625		
Sulfide	430	mg/kg	50	12-13/1430	12-13/1430		
Ignitability	>60	°C		12-13/1500	12-13/1700		ETS
Corrosivity	Negativ	ve .		12-14/1600	12-14/1600		ISW
рН	8.1	SU		12-14/1600	12-14/1600	9040	ISW
P	. 9						

: Parts Storage (Assemby) Lab # 11/Sample ID

Lab # 11/Sample 10	. 14100 0001	J - (Date/Time	Date/Time	
Dayamatar	Result	Units	DL	Prepared	Analyzed Method	Analyst
<u>Parameter</u> TPH	BDL	mg/kg		12-07/1526	12-08/1006 418.1	AEM

: Parts Storage Lab # 12/Sample ID

Lab # 12/Bampie 10 .		5		Date/Time	Date/Time	
D	Result	Units	DL			Analyst
Parameter TPH	BDL	mg/kg	25.0	12-07/1526	12-08/1006 418.1	AEM

Lab # 13/Sample ID

Wheel Revetting

Lab # 13/5dmp10 15		2		Date/Time	Date/Time	
Develop	Result	Units	DL	Prepared	Analyzed Method	Analyst
Parameter TPH	BDL	mg/kg	25.0	12-07/1526	12-08/1006 418.1	AEM
	* p					

Lab # 14/Sample ID : Air/Electic Tools

Dan # 14/0ambio in				Date/Time	Date/Time	
Baramatar	Result	Units	DL	Prepared	Analyzed Method	<u>Analyst</u>
Parameter TPH	BDL	mg/kg		12-07/1526	12-08/1006 418.1	AEM

BDL = Bel w Detection Limit

Emile T. Shaw Laboratory Manager R9C31646-5/7



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Schnabel Environmental Svcs.

Attn: Russ Harris 1 West Cary Street Richmond, VA 23220 Project Name : Rehrig Facility Date Received: December 02, 1999 Date Sampled: December 02, 1999

Time Sampled: 08:45

Date Issued : December 06, 1999

知子 : Pit - New Plating Line 27 Lab # 1/Sample ID

Lab # 1/Sample ID	: Plt - New I	racing i	THE Z		
rap # 1/bampro or		_		Date/Time	Date/Time
Deventor	Result	Units	DL	Prepared	Analyzed Method Analyst
Parameter	349.46	mq/kg	12.50	12-03/1420	12-06/1618 7520 CMG
Nickel	BDL	mg/kg	6.25	12-03/1420	12-06/1452 7190 CMG
Chromium	BDL	mg/1	.25	12-02/1210	12-06/1452 1311/7190CMG
TCLP Chromium		mg/ I	• 2 3		, ,
	#28	Dlating T	ino 28		
Lab # 2/Sample ID	: Pit - New 1	Plating L	The Zo	Date/Time	Date/Time
				•	· · · · · · · · · · · · · · · · · · ·
Parameter	Result	Units	DL	Prepared	Analyzed Method Analyst
Nickel	2285.11	mg/kg	12.50	12-03/1420	12-06/1618 7520 CMG
Chromium	91.42	mg/kg	6.25	12-02/1210	12-06/1452 7190 CMG
	0.30	mg/1	.25	12-02/1210	12-06/1452 1311/7190CMG
TCLP Chromium	¥ 29	5/ -		•	
		nlakina T	inc 29		
Lab # 3/Sample ID	: Pit - New !	Plating D	The 25	Date/Time	Date/Time
				•	
Parameter	Result	Units	DL	Prepared	
Nickel	14.81	mg/kg	12.50	12-03/1420	12-06/1618 7520 CMG
Chromium	BDL	mg/kg	6.25	12-03/1420	12-06/1452 7190 CMG
	BDL	mg/l	.25	12-02/1210	12-06/1452 1311/7190CMG
TCLP Chromium	222	3 / =		•	

BDL = Below Detection Limit

Emile T. Shaw

Laboratory Manager

R9C31586-1



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LABORATORIES, INC.

Schnabel Environmental Svcs.

Attn: Russ Harris 1 West Cary Street Richmond, VA 23220

Project No. : 993619

Project Name : Rehrig Facility Date Received: December 06, 1999 Date Sampled: December 02, 1999

Time Sampled: 08:45

Date Issued : December 14, 1999

: Pit - New Plating Line 27 Lab # 1/Sample ID

· · · · · · · · · · · · · · · · · · ·						
			Date/Time	Date/Time		
Parameter	Result Un	its DL	Prepared	Analyzed	Method 1	Analyst
Reactivity	Negativemg	/kg	12-07/1130	12-13/1430	7.3	RLO
Cyanide	BDL mg	/kg 25	12-07/1130	12-09/1210	7.3/9010	RLO
Sulfide	BDL mg	/kg 50	12-13/1430	12-13/1430	7.3/9030	MLC
Ignitability	>60 °C		12-10/0930	12-10/1630	1010	YPH
Corrosivity	Negative		12-14/1600	12-14/1600	7.2	ISW
pн	7.5 SU		12-14/1600	12-14/1600	9040	ISW

: Pit - New Plating Line 28 Lab # 2/Sample ID

			Date/Time	Date/Time		
Result	Units	DL	Prepared	Analyzed	Method	Analyst
Negati	vemg/kg		12-07/1130	12-13/1430	7.3	RLO
BDL	mg/kg	25	12-07/1130	12-09/1210	7.3/901	0 RLO
BDL	mg/kg	50	12-13/1430	12-13/1430	7.3/903	0 MLC
>60	°C		12-10/0930	12-10/1630	1010	YPH
Negati	ve		12-14/1600	12-14/1600	7.2	ISW
9.2	SU		12-14/1600	12-14/1600	9040	ISW
	Negati BDL BDL >60 Negati	Negativemg/kg BDL mg/kg BDL mg/kg >60 °C Negative 9.2 SU	Negativemg/kg BDL mg/kg 25 BDL mg/kg 50 >60 °C Negative 9.2 SU	Result Units DL Prepared Negativemg/kg 12-07/1130 BDL mg/kg 25 12-07/1130 BDL mg/kg 50 12-13/1430 >60 °C 12-10/0930 Negative 12-14/1600 9.2 SU 12-14/1600	Result Units DL Prepared Analyzed Negativemg/kg 12-07/1130 12-13/1430 BDL mg/kg 25 12-07/1130 12-09/1210 BDL mg/kg 50 12-13/1430 12-13/1430 >60 °C 12-10/0930 12-10/1630 Negative 12-14/1600 12-14/1600 9.2 SU 12-14/1600 12-14/1600	Result Units DL Prepared Analyzed Method Negativemg/kg 12-07/1130 12-13/1430 7.3 BDL mg/kg 25 12-07/1130 12-09/1210 7.3/901 BDL mg/kg 50 12-13/1430 12-13/1430 7.3/903 >60 °C 12-10/0930 12-10/1630 1010 Negative 12-14/1600 12-14/1600 7.2 9.2 SU 12-14/1600 12-14/1600 9040

#27 : Pit - New Plating Line 29 Lab # 3/Sample ID

				Date/Time	Date/Time		
Parameter	Result	Units	DL	Prepared	Analyzed	Method A	nalyst
Reactivity	Negati	.vemg/kg		12-07/1130	12-13/1430	7.3	RLO
Cyanide	BDL	mg/kg	25	12-07/1130	12-09/1210	7.3/9010	RLO
Sulfide	335	mg/kg	50	12-13/1430	12-13/1430	7.3/9030	MLC
Ignitability	>60	°C		12-10/0930	12-10/1630	1010	YPH
Corrosivity	Negati	ve		12-14/1600	12-14/1600	7.2	ISW
На	9.6	su		12-14/1600	12-14/1600	9040	ISW

BDL = Below Detection Limit

Emile T. Shaw Laboratory Manager

R9C31645-1



10357 Old Keeton Road Glen Allen, Virginia 23059 Phone 804 • 550 • 3971 Fax 804 • 550 • 3826

Schnabel Environmental Svcs.

Attn: Russ Harris 1 West Cary Street Richmond, VA 23220

Project No. : 993619

Project Name : Rehrig Facility Date Received: December 06, 1999 Date Sampled: December 02, 1999

Time Sampled: 14:31

Date Issued : December 14, 1999

Lab # 15/Sample ID

Chemical Storage

Lab # 15/Sample 10	. 01.01.12042			Date/Time	Date/Time		
Daysmotor	Result	Units	DL	Prepared	Analyzed	Method i	Analyst
Parameter	BDI.	mg/kg	12.50	12-09/1500	12-10/1115	7520	CMG
Nickel	BDL	mg/kg	6.25	12-09/1500	12-10/1230	7190	ETS
Chromium		vemg/kg		12-07/1300	12-13/1430	7.3	RLO
Reactivity	BDL	mg/kg	25	12-07/1300	12-09/1625	7.3/901	0 RLO
Cyanide	406	mg/kg	50	12-13/1430	12-13/1430	7.3/903	O MLC
Sulfide	>60	°C		12-13/1500	12-13/1700	1010	ETS
Ignitability	Negati	_		12-14/1600	12-14/1600		ISW
Corrosivity	•	SU		12-14/1600	12-14/1600		ISW
рH	9.2	20		12 11/1000			

Lab # 16/Sample ID

#30 Chemical Storage Date/Time Date/Time

D	Result	Units	DL	Prepared	Analyzed N	Method A	Analyst
Parameter	BDL	mg/kg	12.50	12-09/1500	12-10/1115	7520	CMG
Nickel		2, 2	6.25	12-09/1500	12-10/1230	7190	ETS
Chromium	12.23	mg/kg		12-07/1300	12-13/1430		RLO
Reactivity	Negati	vemg/kg		•	12-13/1430		
Cyanide	BDL	mg/kg	25	12-07/1300	•	· ·	
Sulfide	383	mg/kg	50	12-13/1430	12-13/1430	-	
Ignitability	>60	°C		12-13/1500	12-13/1700		ETS
_	Negati	ve		12-14/1600	12-14/1600	7.2	ISW
Corrosivity	9.6	SU		12-14/1600	12-14/1600	9040	ISW
pH ,	9.0	50			/		

Lab # 17/Sample ID

Parking Lot Near Warehouse

Lab # 1//Sample 1D	. Flanking bo			Date/Time	Date/Time	
Parameter	Result	Units	DL	Prepared	Analyzed Method	Analyst
Semi-volatiles	BDL BDL	mg/kg mg/kg	5.0		12-08/1600 8015B 12-08/1815 8015B	
Volatiles	BUE - 8/	mg/kg	• 5	12 00,000	,	

Lab # 18/Sample ID

Parking Lot Near Visiting Parking Area

				Date/Time	Date/Time	
Danamatax	Result	Units	DL	Prepared	Analyzed Method	Analyst
Parameter Semi-volatiles	BDL	mg/kg	5.0	12-08/0900	12-08/1600 8015B	MDP

BDL = Below Detection Limit

Emile T. Shaw

Laboratory Manager

R9C31646-6/7



10357 Old Keeton Road Glen Allen, Virginia 23059 Phone 804 • 550 • 3971 Fax 804 • 550 • 3826

LABORATORIES, INC.

Schnabel Environmental Svcs.

Attn: Russ Harris 1 West Cary Street Richmond, VA 23220 Project No. : 993619

Project Name : Rehrig Facility Date Received: December 06, 1999 Date Sampled: December 02, 1999

Time Sampled: 15:23

Date Issued : December 14, 1999

Parking Lot Near Visiting Parking Area Lab # 18/Sample ID

> Date/Time Date/Time

Parameter Result Units DL Prepared Analyzed Method Analyst Volatiles BDL mg/kg 12-08/0830 12-08/1815 8015B

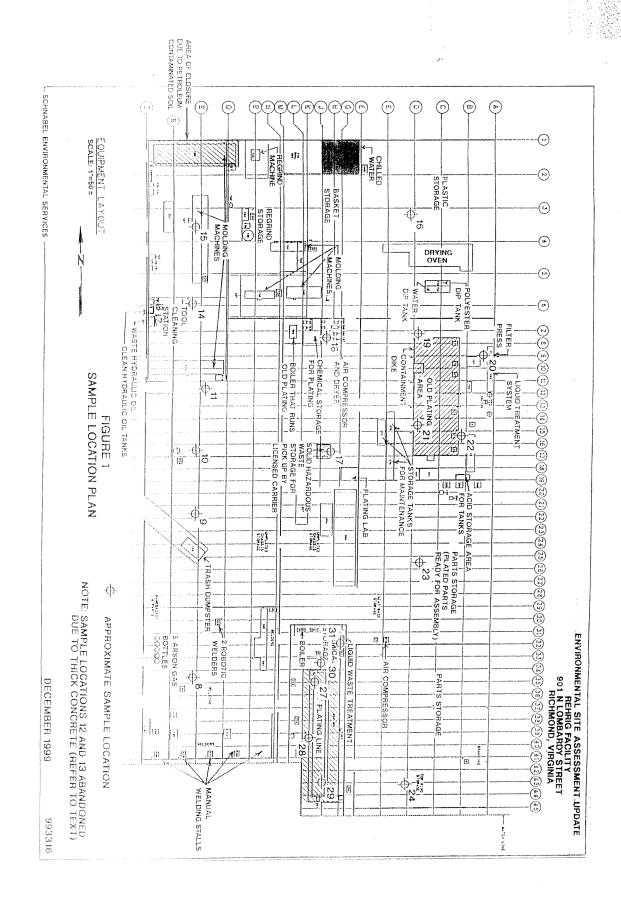
Lab # 19/Sample ID Parking Lot Near Rear

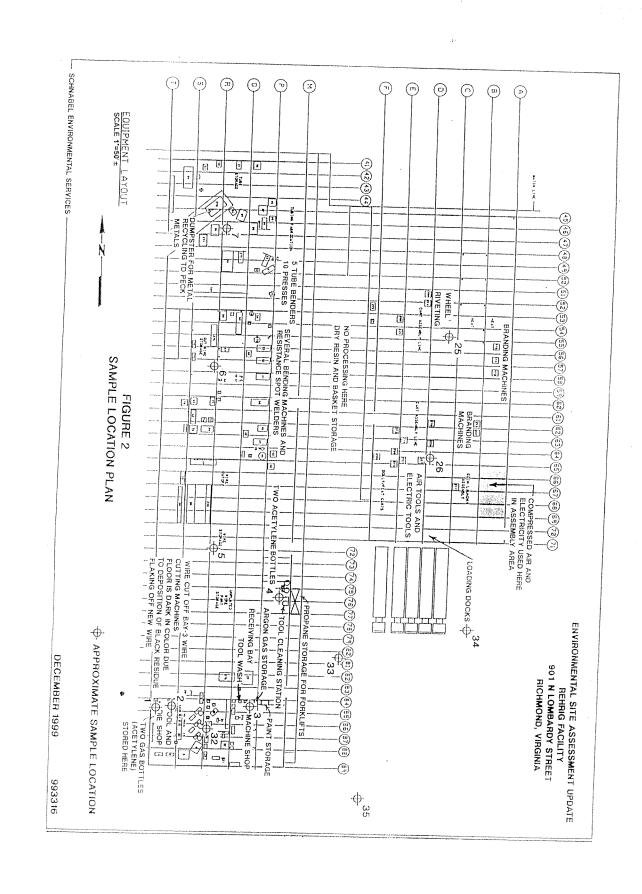
Date/Time Date/Time Parameter Result Units DL Prepared Analyzed Method Analyst Semi-volatiles 31.5 mg/kg 5.0 12-08/0900 12-08/1600 8015B MDP 12-08/0830 12-08/1815 8015B Volatiles BDL mg/kg .5 BRG

BDL = Below Detection Limit

Emile T. Shaw Laboratory Manager

R9C31646-7/7





MAY 21, 1993

LETTER FROM VIRGINIA DEPARTMENT OF WASTE MANAGEMENT TO REHRIG INTERNATIONAL



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

(804) 225-2667 TDD (804) 371-8737

MAY 2 1 1993

Mr. Paul Bauz Plating Manager Rehrig International 901 N. Lombardy Street Richmond, Virginia 23220

> RE: RCRA Compliance Inspection EPA ID# VAD089028377

Dear Mr. Bauz:

RICHARD N. BURTON

DIRECTOR

During a recent (May 13, 1993) inspection, it was noted that your facility was not in total compliance with the Virginia Hazardous Waste Management Regulations (VHWMR). Such instances are indicated by check marks on the enclosed inspection checklists and are listed below:

- 1. There is insufficient aisle space in the less than 90-day accumulation area as required by VHWMR §9.2.E.
- 2. Hazardous waste accumulation areas have been established without prior notification of the Director as required by VHWMR §6.4.E.1.e.
- 3. The Contingency Plan needs to be updated to reflect the changes in accumulation areas, to include a new alternate coordinator, and to add some emergency response agencies as required by VHWMR §9.3.C.

Containers were stored in the less than 90-day accumulation area in a manner that did not allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment in the event of an emergency (VHWMR §9.2.E). Container inspections required by VHWMR §9.8.E cannot be properly accomplished with the current method of storage (four rows of drums on pallets and/or large bags three deep and stacked two high). The need for an increase in storage area, or some system of storage racks was discussed during the inspection.

Mr. Paul Bauz Page 2

The addition of another plating operation and changing to large bags instead of 55 gallon drums for waste accumulation have caused the need to establish two new accumulation areas. Since the bags have a capacity greater than 55 gallons the accumulation areas near each filter press can no longer be satellite accumulation areas (VHWMR §6.4.e.3.a.) and must be designated as less than 90-day accumulation areas. Please note that bags must always be closed except as necessary to add waste (VHWMR §9.8.D.1).

Please take the appropriate corrective action to bring your facility into compliance with the regulations within 30 days of receipt of this letter and send a letter to the Department at that time stating that you have done so.

If you have any questions regarding this matter, please call me at (804) 225-2667 or Robert Lincoln at (804) 786-7111.

Sincerely,

Glenn E. Moore

Hazardous Waste Compliance Manager

Waste Division

Enclosures

CC: Sherri Eng, Waste Division, OCE Robert Lincoln, Waste Division, OCE

SURVEY SHEET FOR INSPECTION OF HAZARDOUS WASTE FACILITIES

Name of Facility: Rehrig International

Address: 901 North Lombardy Street

Richmond, VA 23220

EPA ID Number: VAD089028377

Facility Representative: Paul Bauz

Title: Plating Manager

Telephone Number: (804) 355-7864

Inspector's Name: Glenn E. Moore, Robert Lincoln

Title: <u>Hazardous Waste Compliance Manager</u>, <u>Analytical Chemist</u>

Date of Inspection: May 13, 1993

1. What is the business activity of the firm? (i.e., furniture mfg., metal plating, recycling, etc.) Manufacturer of shopping carts and shopping baskets.

2. Give a brief description of the waste stream(s) [by chemical name, if possible] and hazardous waste code(s) generated by the firm.

F006 Stabilized waste sludge from nickel trichrome plating process

3. List the highest amounts of hazardous waste ever generated in any month of the calendar year and the greatest amount ever accumulated at the site of each type of waste generated.

Waste Code - Amount Generated Amount Accumulated 8,666 lbs/month * 24,500 lbs **

* Based on 1992 single line operation

** Includes waste from second line starting in April 1993

4. Does the facility ever generate greater than: 1 kg. of acutely toxic waste (P listed waste or NO F020-F023 and F026-F027)?

100 kg of clean-up from a spill of P listed waste NO or F020-F023 and F026-F027 waste?

If yes, then the facility is a large quantity generator.

5. How is the waste presently being handled? Where is it sent? (List all transporters and facilities, or on-site treatment performed).

F006 Envirosafe Services of Ohio, OHD045247905.

Buffalo Fuel Corp. NYD051809952
Envirosafe Services of Ohio, OHD045243706.

Transporter
Transporter

- 6. Does the facility generate any hazardous waste NO that is excluded from regulation? If yes, list the waste and the basis for exclusion.
- 7. Does the facility generate any hazardous waste NO that is burned for energy recovery (hazardous waste fuel)? If yes, list the waste, where it is sent, and complete the Recyclable Materials Checklist.
- 8. Does the facility <u>generate</u> any used oil that No is burned for energy recovery (used oil fuel), including used oil that is also a characteristic hazardous waste, or used oil that is mixed with hazardous waste generated by a conditionally exempt Small Quantity Generator? If yes, list the waste, where it is sent, and complete the Recyclable Materials Checklist.
- 9. Does the facility generate any hazardous waste NO that is reclaimed to recover economically feasible amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these? If yes, list the waste, where it is sent, and complete the Recyclable Materials Checklist.
- 10. Does the facility transport, collect or reclaim NO spent lead-acid batteries? If yes, complete the Recyclable Materials Checklist.

- 11. Based on the above, the facility is a:
 - a. conditionally exempt small quantity generator
 - b. small quantity generator
 - c. generator
 - d. permitted or interim status TSD
 - e. unpermitted TSD (explain in comments section) [Circle All That Are Applicable]
- 12. Check accumulation times and quantities for the three types of generators. If the times or quantities are exceeded, then the facility is moved up to the next category. Complete the appropriate checklist(s).

A conditionally exempt small quantity generator can accumulate for an indefinite period of time until he has accumulated 1000 kg (approx. 5 55-gallon drums) of non-acute hazardous waste, at which time the accumulation times (180 days or 270 days) for small quantity generators begins.

Small quantity generators can accumulate hazardous waste for up to 180 days or 270 days if the disposal site is over 200 miles away (in containers and tanks <u>only</u>). However, if at any time over 6000 kgs of waste is accumulated, then the small quantity generator becomes a generator, or an unauthorized facility, as applicable.

13. List each container and tank accumulation area. Specify the number and capacity of each tank and container. [Note: Include any satellite accumulation areas. Verify that only 55 gallons of any particular hazardous waste code (or one quart of acutely toxic waste) is at that area.]

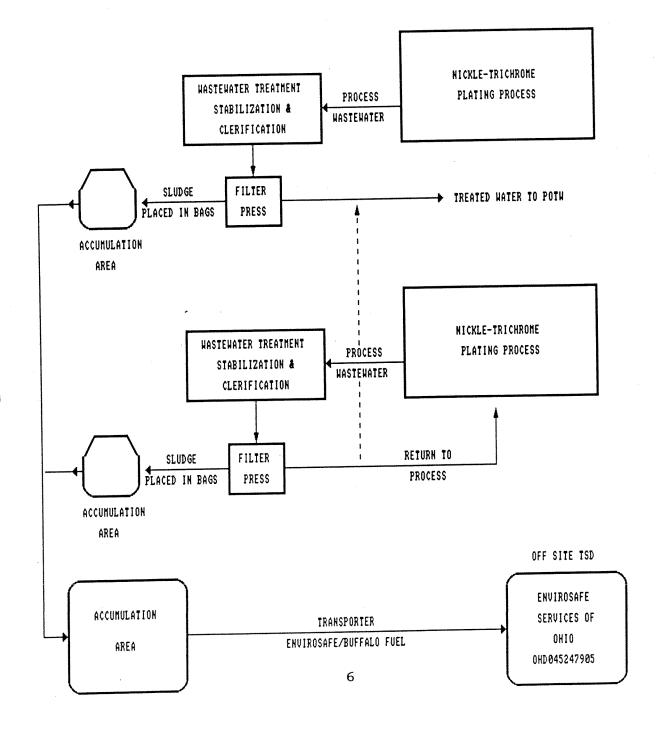
Location	Number of Containers	Number of Tanks	Capacity
#1 Filter Press	1 bag	N/A	1500 lbs
#2 Filter Press	1 bag	N/A	1500 lbs
90-day accumulation area	20 drums 10 bags	N/A	<u>55 gal</u> 1500 lbs

14. Comments

Areas adjacent to the filter presses are accumulation areas since more than 55 gallons is accumulated at a time (1500 lb bags are used to collect the waste). The bags therefore need to be labeled as hazardous waste and dated when accumulation begins. Notification is required for the new accumulation areas. Bags must be kept closed except when waste is actually being added.

15. Waste Management Flow Diagram

(On this page sketch a brief, but detailed, flow diagram that includes how and where the waste is generated, the steps through a treatment system (if any), the steps through storage including satellite accumulation areas. Do this for each waste stream including excluded hazardous waste. Include any waste water treatment facilities at the company, and verify the type of units included in the system, and any hazardous waste streams going to WWT.)



CHECKLIST FOR HAZARDOUS WASTE INSPECTION OF GENERATORS

Name of Facility: Rehrig International

EPA ID Number: VAD089028377

Date of Inspection: 5/13/93

Va. Hazardous Waste Reg.	Generator Checklist	
6.3.	1. Is a manifest system currently being used for all hazardous waste shipped off site?	YES
6.2.C.	2. Has the generator determined that the transporter(s) and facility have an EPA ID number? [Note: Shipments to POTWs must be manifested and the POTW must meet all permit-by-rule requirements of VHWMR Section 11.8.B.]	YES
5.5.A.7	3. Has the generator determined that the transporter has a valid EPA Identification number and a valid Virginia Transporter Permit?	YES
6.3 5.3.B.1.	4. Is the following information on the manifest:	
	a. The generator's name, mailing address, EPA ID Number, and telephone number?	YES
5.3.B.2.	b. A unique five digit number assigned to this manifest by the generator?	YES
5.3.B.3.	c. The total number of pages of the manifest?	YES
5.3.B.4.	d. The company name and EPA ID number of each transporter used?	YES

e. The company name, site address, and EPA ID number of the facility 5.3.B.5. designated to receive the waste? The U. S. DOT description of each YES 5.3.B.6. waste to include its proper shipping name, hazard class, and I.D. number (UN/NA) as identified in the Virginia Governing Regulations Transportation of Hazardous Material? The quantities of waste being YES g. 5.3.B.7. shipped? The following certification: YES h. 5.3.C. hereby declare that the contents of are fully consignment accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition (mode of transport by for according to transportation) applicable international and national governmental regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to a degree I have economically be determined to practicable and that I have selected the practicable method of treatment, currently disposal or storage, available to me which minimizes the present and future threat to human health and environment." Have manifests been received from YES 6.5.C.2. the TSD facility for any waste which was shipped over 45 days ago? If no, has the generator filed an N/A the Executive report with exception Director which included: A legible copy of the manifest N/A 6.5.C.2.a. for which the generator does not have confirmation of the delivery; and A cover letter explaining the N/A 6.5.C.2.b. efforts taken to locate the shipment?

YES

6.4.E.1. Is hazardous waste being accumulated YES on-site for less than 90 days? If yes, Is the waste stored in YES 6.4.E.1.a. а. containers? In tanks? NO (If answer to either question is yes, fill out appropriate checklists. both answers are no, interim status or a TSD permit is required - fill out facility checklist to determine compliance status). 6.4.E.1.b. Is the date that accumulation YES begins clearly marked and visible for inspection on each container? each container and tank 6.4.E.1.c. YES marked with the "Hazardous Waste"? 6.4.E.1.e. Has the generator notified the NO Executive Director by March 1, 1988, of the exact location of the existing accumulation areas, and at least 15 days prior to use for subsequently established accumulation areas? New notification is required for the filter press areas, see Survey Sheet. 6.4.E.2. Does the generator accumulate (store) hazardous waste on-site for greater than 90 days? If yes, interim status or a TSD permit is required - fill out facility checklist to determine compliance status. 6.4.E.1.d. Does the generator record inspections YES 9.1.F.4. in an inspection log? 6.4.E.1.d. Have facility personnel successfully completed a program of classroom training 9.1.G.1. or on-the-job training in hazardous waste management procedures? 9.1.G.2. Have new employees to the facility 10. YES successfully completed training mentioned above within 6 months of their employment

or assignment to the facility?

11. Do personnel participate in an annual YES 9.1.G.3. review of the initial training? Does the facility maintain a record of the following: job titles for each position at YES 9.1.G.4.a. the facility related to hazardous waste management; and b. the name of the employee filling YES 9.1.G.4.a. each job; and a written job description for YES 9.1.G.4.b each position in (a); and a written description of the YES type and amount of both introductory 9.1.G.4.C. and continuing training that will be given to each person filling a position listed in (a); and Records that document that the YES 9.1.G.4.d. training or job experience required above has been given to, completed by facility personnel? 13. At the facility, is the following 9.2.B. equipment installed: 9.2.D. An internal communications or YES 9.2.B.1. alarm system capable of providing immediate emergency instructions to facility personnel if the hazardous accumulation waste generation or areas are threatened by hazardous waste release, fire or explosion? A device (at the scene of 9.2.B.2. hazardous waste generator operations) summoning emergency capable of Police, from assistance Departments, etc.? c. Portable fire extinguishers, fire YES 9.2.B.3. decontamination control, and equipment?; and

9.2.B.4.

d. Water at adequate volume and YES pressure to supply expected fire demands, foam producing equipment, automatic sprinklers or water spray system?

9.2.C.

14. Is a record of tests and inspections YES of items 13 a-d maintained at the facility?

9.2.E.

- 15. Does the facility have adequate aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment during emergencies? The less than 90-day storage area does not have adequate aisle space between containers. Large bags and drums on pallets were three deep, four wide and two high in the accumulation area.
- 6.4.E.1.d. 9.3.
- 16. Does the facility have an established YES contingency plan to deal with any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, ground water or surface water?

9.3.B.

- 17. Does the contingency plan contain the following elements:
- 9.3.B.(1,2).

a. A detailed description of YES emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous waste to air, soil, and water?

9.3.B.3.

A description of arrangements agreed to by local police departments, departments, fire contractors hospitals, Commonwealth and local emergency response teams to coordinate emergency services, as required?

9.3.B.4.

c. A listing of names, addresses, and office and home phone numbers of all persons qualified to act as emergency coordinator? List primary Coordinator.

Name: Paul Bauz

Title: Plating Manager

Telephone: Work: (804) 355-7864 Home: (804) 262-2268

- **d.** A list of appropriate emergency YES equipment necessary to cope with emergencies at the generator facility?
- e. Does this list specify the YES location and physical description of each item on the list and a brief outline of its capabilities?
- f. An evacuation plan for the YES generator facility where there is a possibility that evacuation could be necessary?
- g. Have copies of the contingency plan been sent to all local police departments, fire departments, hospitals and Commonwealth and local emergency response teams? List:

 Richmond Fire Department

 Richmond Police Department

 Stuart Circle Hospital

 VA Department of Waste Management

Updating needed. See comment Item 21.

h. Is there documentation to YES indicate the personnel listed above received the contingency plan?

9.3.B.6.

9.3.B.5.

9.3.B.6.

9.3.C.

9.3.C.

9.3.F.(9,10). Has the contingency plan ever NO been implemented? If yes, was a written report N/A filed with the Executive Director and were the Executive Director and other authorities properly notified before operations resumed? Does the generator have satellite NO 6.4.E.3.a. 18. accumulation areas? If yes, Is the area located at or near N/A waste point of hazardous generation where the wastes initially accumulate? 6.4.E.3.a.(1) Are the containers in good N/A b. condition? 9.8.B. 6.4.E.3.a.(1) Are the containers compatible N/A c. 9.8.C. with the waste? 6.4.E.3.a.(1) Are the containers kept closed N/A 9.8.D.1. except as necessary to add or remove waste? 6.4.E.3.a.(2) Are the containers marked with N/A the words "Hazardous Waste" or other words that identify the contents of the container? 6.5.E.3.b. f. Are amounts in excess of those N/A allowed being accumulated in the satellite accumulation area? If yes, Has the generator marked N/A the excess amount with the date the excess amount began accumulating? Has the generator either N/A removed the excess amount within three days of the date of excess

accumulation areas

accumulations or has he complied with all other provisions for

question 5 on this checklist? Namely, has he notified the

Executive Director about

listed in

location of the accumulation area?

If <u>no</u>, what has the generator chosen to do?

6.5.A.

19. Does the generator retain copies of YES all manifests, annual reports, and test results for at least three years?

6.5.B.

- 20. Has the facility submitted an annual YES report for the preceding calendar year?
- 21. Comments: The lack of sufficient aisle space in the less than 90-day accumulation area is a major concern. The ability to respond to emergencies is greatly diminished, as noted above. We had difficulty seeing the labels and the condition of several of the containers during the inspection.

Notification is required for both new accumulation areas at each filter press.

The following revisions to your Contingency Plan are needed:

- 1.Appoint and specify a new alternate emergency coordinator
- 2. Specify new accumulation areas in the plan text and diagrams.
- 3. Add the following to the emergency response list:
 Virginia Department of Emergency Services, (804) 674-2400; and Richmond LEPC, (804) 780-6660
- 4. Send a revised Contingency Plan or change pages to each required emergency response agency. Please obtain documentation of their receipt of the plan.

INSPECTION CHECKLIST FOR THE USE AND MANAGEMENT OF CONTAINERS

Name of Facility: Rehrig International

EPA ID Number: VAD089028377

Date of Inspection: 5/13/93

Va.	На	ızardous
Wast	e	Reg.

9.8.B.

1. Are all containers holding hazardous waste in good condition, i.e., not showing signs of leakage or corrosion or any other deterioration/deformation?

YES

If <u>no</u>, list the storage/accumulation areas where there are problems and the type of problem:

- 9.8.C.
- 2. Are the containers lined or made of materials compatible with hazardous waste placed into them so that the container will not react with, or otherwise be incompatible with, the hazardous wastes stored?

YES

- 6.4.E.b
- 3. Is the date upon which each period of accumulation begins clearly marked and visible for inspection on each container?

YES

- 6.4.E.c.
- 4. Is the container labeled or marked clearly with the words "Hazardous Waste"?

YES

- 9.8.D.1.
- 5. Are all containers holding hazardous waste kept closed during storage except as necessary to add or remove waste?

NO

If <u>no</u>, list the locations where open containers are found. <u>Bag was open at the former satellite area near filter press #1.</u>

9.8.E.	6. Are areas where hazardous waste containers are stored inspected by the owner/operator at least weekly?	YES
9.1.F.2.a. 9.1.F.4. 6.4.E.1.d.	7. For large quantity generators and TSD facilities only: Is an inspection log maintained?	YES
9.8.F.	8. Are containers holding ignitable or reactive waste located at least 50 ft. from the facility's property line?	N/A
8.G.1.	9. Are incompatible wastes placed in separate containers?	N/A
9.8.G.3.	10. Are storage containers holding hazardous wastes which are incompatible with any materials or other hazardous wastes stored nearby separated from the other materials or protected from them by means of dikes, berms, walls, or other devices?	N/A
6.4.E.3.a.	<pre>11. For satellite accumulation areas:</pre>	
	a. Is the area at or near the point the point of generation? (If no, the area is not a satellite accumulation area, and inspection and notification requirements are applicable).	N/A
	b. Are there more than 55 gallons of any one type of waste present in the area?	N/A

If yes,

6.4.E.3.b

c. Has the amount in excess of 55 gallons been in the satellite accumulation area longer than 3 days?

N/A

If yes,

6.4.E.3.b. 6.4.E.1.b. **d.** Has the company notified the Department about the location of the accumulation area?

N/A

10. Comments: Container (bag) in the accumulation area near the old filter press contained waste and was open. Containers must always be closed except as needed to add or remove waste.

CHECKLIST FOR HAZARDOUS WASTE INSPECTION OF LAND-RESTRICTED WASTE MANAGEMENT

Name of Facility: Rehrig International

EPA ID Number: VAD089028377

Date of Inspection: 5/13/93

15.1.A.3.

15.1.A.3.a.

15.1.A.3.b.

15.1.A.3.C.

15.1.E.

Does the facility generate, transport, or treat, store or dispose any land-restricted wastes? (See Attachment) If yes, please list: Nickel trichrome plating sludge F006 Is land disposal of wastes listed in 1 above NO 2. occurring? If yes, then: facility been granted N/A the Has extension to the effective date for land restrictions applicable to its restricted listed effective (See dates waste? Attachment) N/A facility been granted Has the b. exemption from prohibition pursuant to a petition for those land-restricted wastes and units covered by the petition? Is the waste generated by small quantity N/A generators of less than 220 pounds (100 kg) of hazardous waste, or 1 kg of acutely hazardous waste, per month?

Has the owner/operator submitted

date of any applicable

application for a case-by-case extension to

N/A

effective

restriction?

15.1.F. Has the owner/operator been granted a N/A petition seeking an exemption prohibition for the disposal of hazardous waste in a particular unit or units? 15.1.C. Are facility representatives diluting the NO restricted waste or residual from treatment of the restricted waste as a substitute for adequate treatment, to circumvent the effective date of prohibition, to otherwise avoid a prohibition, or to circumvent a land disposal prohibition? 15.1.D.1. 4. Is the facility treating land-restricted NO wastes in a surface impoundment or series of surface impoundments? (If no, go to number 6) [If yes, complete surface impoundment checklist] [Note: Evaporation of hazardous constituents in a surface impoundment as the principal means of treatment is not considered to be an acceptable form of treatment for land restricted wastes.] If yes, does the facility meet the following requirements: 15.1.D.1.b a. Are the residues of the treatment analyzed N/A 15.1.G. as specified in VHWMR Sections 15.1.G.or 15.3.C. 15.3.C. to determine if they meet 15.4. applicable treatment standards or VHWMR 15.3. Section 15.4, or where no applicable treatment standard exists, the applicable prohibition levels specified in VHWMR Section 15.3? 15.1.D.1.c. b. Has the owner or operator installed two or N/A 10.B.1. more liners and a leachate collection system .10.B.3. consisting of an upper and lower liner designed, constructed and operated to prevent the migration of any constituents through the liners? 15.1.D.1.c. c. Is the facility in compliance with the N/A 10.5. applicable groundwater monitoring requirements

of VHWMR Section 10.5.?

		NT / 7
15.1.D.1.d.	d. Has the owner or operator submitted a written certification to the Executive Director that items a-c have been met which states,	N/A
	"I certify under penalty of law that the requirements of 15.1.D.1.c. have been met for all surface impoundments being used to treat restricted wastes. I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."?	
15.1.D.1.d.	e. Has the owner/operator submitted a copy of the waste analysis plan for his restricted wastes accompanied by the above certification?	N/A
15.1.G.1.	5. Has the owner/operator determined if his waste is a land restricted waste?	YES
15.1.G.1.a.	6. For restricted wastes which the generator is managing for which he has not met the applicable treatment standards, has the generator accompanied each shipment of waste with a notification to the treatment facility of the appropriate treatment standards and any applicable prohibitions?	YES
	Did the notification include the following information:	•
15.1.G.1.b.1.a	- EPA Hazardous Waste Number;	YES
.1.G.1.b.1.b	- The corresponding treatment standards and all applicable prohibitions set forth in VHWMR Section 15.3.C;	YES
15.1.G.1.b.1.c	- The manifest number associated with the shipment of waste;	YES
15.1.G.1.b.1.d	- Waste analysis data, where available?	YES

- 15.1.G.1.b.

 7. For restricted wastes which the generator has determined can be land disposed without further treatment, has the generator accompanied each shipment of waste with a notification and certification to the land disposal facility that the waste meets the applicable treatment standards and the applicable prohibitions of VHWMR Section 15.3.C?
 - a. Did the notification contain the following information:

N/A

- 15.1.G.1.b.1.a EPA Hazardous Waste Number; N/A
- 15.1.G.1.b.1.b The corresponding treatment standards N/A and all applicable prohibitions;
- The manifest number associated with the N/A shipment of waste; and
- 15.1.G.1.b.1.d Waste analysis data, where available? N/A
- b. Was the certification signed by an N/A authorized representative, and did it state the following:

"I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in VHWMR Section 15.4. and all applicable prohibitions set forth in VHWMR Section 15.3.C. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false а certification, including the possibility of a fine and imprisonment."

15.1.G.1.c.

8. For restricted wastes which have received a N/A case-by-case exemption, been granted an exemption through petition, or those wastes subject to a national variance, has the generator forwarded a notice with the waste to the land disposal facility stating that the waste is exempt from the land disposal restrictions?

15.1.G.f.	9. Does the generator retain on-site copies of all notices, certification, demonstrations, waste analysis data, and other documentation for at least five years from the date the waste was last sent to on-site or off-site treatment, storage or disposal?	YES
15.1.G.2.	10. For Treatment Facilities ONLY: Has the owner or operator of the treatment facility tested the treatment residues or extract to assure that they shall meet the applicable treatment standards?	N/A
15.1.G.2.	a. Has this testing been done at the frequency stated in the waste analysis plan?	N/A
15.1.G.2.a. 15.1.G.1.a.	b. For treatment residuals which do not meet the applicable treatment standards, has the facility filed the notification in 8 above as a generator to any subsequent treatment facilities?	N/A

15.1.G.2.b.

15.5.1.a.

c. For treated wastes meeting the applicable treatment standards, or for wastes not subject to any treatment standards, has a certification been signed and accompanies each shipment stating:

N/A

"I certify under penalty of law that I have personally examined and am familiar the treatment technology operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to achieve the performance levels specified in VHWMR Sections 15.4 and 15.3.C. without dilution of the prohibited waste. I am that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

OR (for wastes with treatment standards expressed as technologies)

"I certify under penalty of law that the waste has been treated in accordance with the requirements of VHWMR Section 15.4.C. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

11. Is the generator storing land restricted N/A waste? (For one year storage only)

a. If yes, is the storage on-site solely for N/A the purpose of the accumulation of such quantities of hazardous waste as necessary to facility proper recovery, treatment or disposal?

12. Comments: None.

Attachment - Land Restricted Wastes

Waste	Effective Date
F001 - F005	11/08/86
F001 - F005 from Small Quantity Generators, generated via RCRA corrective actions or CERCLA response actions, and hazardous wastes containing less than 1% total solvent constituents	11/08/88
F001 - F005 soil and debris resulting from RCRA corrective actions or CERCLA response actions	11/08/90

California Listed Wastes

Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing free cyanides at concentrations greater than or equal to 1,000 ppm (mg/l).

7/8/87

Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing any of the following metals or compounds of these metals at concentrations greater than or equal to those specified below:

Arsenic (as As)	500 mg/l
Cadmium (as Cd)	100 mg/l
Chromium (as Cr VI)	500 mg/l
Lead (as Pb)	500 mg/l
Mercury (as Hg)	20 mg/l
Nickel (as Ni)	134 mg/l
Selenium (as Se)	100 mg/l
Thallium (as Tl)	130 mg/l

Liquid hazardous wastes having a Ph less than or equal to 2.0. 7/8/87

Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm. 7/8/87

Liquid hazardous wastes, primarily water, containing greater than or equal to 1000 mg/l HOCs, but less than or equal to 10,000 mg/l HOCs.

California waste contaminated soil and debris resulting from RCRA corrective actions or CERCLA response actions. 11/8/90

Liquid hazardous wastes, not primarily water, containing greater than or equal to 1000 mg/l HOCs. 11/8/88

Non-liquid (non-RCRA/CERCLA) hazardous wastes containing greater than or equal to 1000 mg/l HOCs. 11/8/88

Effective Dates of Land Disposal Restricted Wastes

	Waste Category	Effective Date
0004		
D001	All	Aug. 8, 1990
D002	All	Aug. 8, 1990
D003	All	Aug. 8, 1990
D004	Inorganic Solid Debris	May 8, 1992
D004	Non-wastewater	May 8, 1992
D004	Wastewater	Aug. 8, 1990
D006	Inorganic solid debris	May 8, 1992
D005	All others	Aug. 8, 1990
D006	Inorganic solid debris	May 8, 1992
D006	All others	Aug. 8, 1990
D007	Inorganic solid debris	May 8, 1992
D007	All others	Aug. 8, 1990
D008	Inorganic solid debris	May 8, 1992
D008	Lead acid batteries	
D008	All others	May 8, 1992
D009		Aug. 8, 1990
D009	Inorganic solid debris	May 8, 1992
D009	High mercury non-wastewater	May 8, 1992
	Low mercury non-wastewater	May 8, 1992
D009	All others	Aug. 8, 1990
D010	Inorganic solid debris	May 8, 1992
D010	All others	Aug. 8, 1990
D011	Inorganic solid debris	May 8, 1992
D011	All others	Aug. 8, 1990
D012	All	Aug. 8, 1990
D013	All	Aug. 8, 1990
D014	All	Aug. 8, 1990
D016	All .	Aug. 8, 1990
D016	All	Aug. 8, 1990
7	All	Aug. 8, 1990
202	All	Aug. 8, 1990
F005	All	Aug. 8, 1990
F006	Wastewater	Aug. 8, 1990
F006	Non-wastewater	
F006 (cyan.)	Non-wastewater	Aug. 8, 1988
F007	All	July 8, 1989
F008	All	July 8, 1989
F009	All	July 8, 1989
F010	Soil & debris	July 8, 1989
F010		June 8, 1991
F011	All others	June 8, 1989
F012	All	July 8, 1989
	All	July 8, 1989
	All	Aug. 8, 1990
F019		
F020	Soil & debris	Nov. 8, 1990
F020 F020	Soil & debris All others	Nov. 8, 1990 Nov. 8, 1988
F020 F020 F021	Soil & debris All others Soil & debris	
F020 F020 F021 F021	Soil & debris All others	Nov. 8, 1988
F020 F020 F021 F021 F022	Soil & debris All others Soil & debris All others Soil & debris Soil & debris	Nov. 8, 1988 Nov. 8, 1990
F020 F020 F021 F021	Soil & debris All others Soil & debris All others	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988
F020 F020 F021 F021 F022 F022	Soil & debris All others Soil & debris All others Soil & debris Soil & debris	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990
F020 F020 F021 F021 F022 F022	Soil & debris All others Soil & debris All others Soil & debris Soil & debris	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990
F020 F020 F021 F021 F022 F022	Soil & debris All others Soil & debris All others Soil & debris All others	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988
F020 F020 F021 F021 F022 F022	Soil & debris All others Soil & debris All others Soil & debris All others Soil & debris	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988
F020 F020 F021 F021 F022 F022	Soil & debris All others	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 June 8, 1991
F020 F020 F021 F021 F022 F022 F023 F023 F024	Soil & debris All others Soil & debris	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 June 8, 1991 Aug. 8, 1990
F020 F020 F021 F021 F022 F022 F023 F023 F024 metals	Soil & debris All others Soil & debris Non-westewater	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 June 8, 1991
F020 F020 F021 F021 F022 F022 F023 F023 F024 Metals	Soil & debris All others Soil & debris Non-westewater	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 June 8, 1991 Aug. 8, 1990 Aug. 8, 1990
F020 F020 F021 F021 F022 F022 F023 F023 F024 dioxins/	Soil & debris All others	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 June 8, 1991 Aug. 8, 1990 June 8, 1990
F020 F020 F021 F021 F022 F022 F023 F023 F024 metals dioxins/ furans	Soil & debris All others All others All others All others All others	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 June 8, 1991 Aug. 8, 1990 Aug. 8, 1990 June 8, 1988 Aug. 8, 1990
F020 F020 F021 F021 F022 F022 F023 F023 F024 dioxins/ furans F024 F026	Soil & debris All others All others All others All others All others All others	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1990 June 8, 1989 Aug. 8, 1990 Nov. 8, 1990
F020 F020 F021 F021 F022 F022 F023 F023 F024 Metals dioxins/ furans F024 F026 F026 F026	Soil & debris All others Soil & debris Non-westewater All All others	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1991 Aug. 8, 1990 Aug. 8, 1990 June 8, 1988 Aug. 8, 1990 Nov. 8, 1980 Nov. 8, 1988
F020 F020 F021 F021 F022 F023 F023 F024 dioxins/ furans F024 F026 F026 F026 F027	Soil & debris All others Soil & debris Non-westewater All All others Soil & debris All others Soil & debris	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1998 June 8, 1991 Aug. 8, 1990 Aug. 8, 1990 June 8, 1988 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1980
F020 F020 F021 F021 F022 F023 F023 F024 dioxins/ furans F024 F026 F026 F027 F027	Soil & debris All others Soil & debris Non-wastewater All All others All others Soil & debris All others All others All others All others All others All others Soil and debris All others	Nov. 8, 1988 Nov. 8, 1890 Nov. 8, 1988 Nov. 8, 1988 Nov. 8, 1998 Nov. 8, 1990 Nov. 8, 1988 June 8, 1991 Aug. 8, 1990 Aug. 8, 1990 June 8, 1988 Aug. 8, 1990 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988
F020 F020 F021 F021 F022 F022 F023 F024 Metals dioxins/ furans F024 F025 F026 F026 F027 F027 F027	Soil & debris All others Soil & debris Non-wastewater All All others All Soil & debris All others All Soil & debris All others Soil and debris All others Soil and debris	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1998 Nov. 8, 1998 Nov. 8, 1998 June 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1990 Nov. 8, 1990 Nov. 8, 1990 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990
F020 F020 F021 F021 F022 F022 F023 F023 F024 metals dioxins/ furans F024 F026 F026 F026 F027 F027 F028 F028	Soil & debris All others Soil & debris Non-wastewater All All others All others Soil & debris All others All others All others Soil and debris All others Soil and debris All others Soil and debris All others	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1998 June 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1990 Nov. 8, 1990 Nov. 8, 1990 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1980 Nov. 8, 1980
F020 F020 F021 F021 F022 F022 F023 F023 F024 ### Minimal ### Minimal ### Minimal ### F026 F026 F026 F027 F027 F028 F028 F039	Soil & debris All others Soil & debris Non-wastewater All All others All others Soil & debris All others All others All Soil & debris All others Soil and debris All others Soil and debris All others Soil and debris All others Wastewater	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1990 Nov. 8, 1990 Nov. 8, 1990 Nov. 8, 1988 June 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1989 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Aug. 8, 1990
F020 F020 F021 F021 F022 F023 F023 F024 metals dioxins/ furans F024 F026 F026 F026 F027 F027 F027 F028 F039 F039	Soil & debris All others Soil & debris Non-wastewater All All others All others Soil & debris All others All others All Soil & debris All others Soil and debris All others Soil and debris All others Soil and debris All others Wastewater Non-wastewater	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1998 June 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1990 Nov. 8, 1990 Nov. 8, 1990 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1980 Nov. 8, 1988 Aug. 8, 1980 May 8, 1992
F020 F020 F021 F021 F022 F023 F023 F024 metals dioxins/ furans F024 F026 F026 F026 F027 F027 F027 F028 F028 F039 F039 K001	Soil & debris All others Soil & debris Non-wastewater All All others All others Soil & debris Non-wastewater All All others All Soil & debris All others Soil and debris All others Soil and debris All others Soil and debris All others Vastewater Non-wastewater Soil & debris	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1990 Nov. 8, 1990 Nov. 8, 1990 Nov. 8, 1988 June 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1989 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Aug. 8, 1990
F020 F020 F021 F021 F022 F022 F023 F024 Metals dioxins/ furans F024 F026 F026 F026 F027 F027 F027 F028 F028 F039 F039 K001 K001 lead/	Soil & debris All others Soil & debris Non-wastewater All All others All others Soil & debris All others All others All Soil & debris All others Soil and debris All others Soil and debris All others Soil and debris All others Wastewater Non-wastewater	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1998 June 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1988 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1980 Nov. 8, 1980 Nov. 8, 1980 May 8, 1992
F020 F020 F021 F021 F022 F022 F023 F023 F024	Soil & debris All others Soil & debris Non-wastewater All All others All others Soil & debris All others All others All others Soil & debris All others Soil and debris All others Vastewater Non-wastewater Soil & debris All	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1998 Nov. 8, 1998 Nov. 8, 1990 Nov. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Aug. 8, 1990 Nov. 8, 1988
F020 F020 F021 F021 F022 F022 F023 F023 F024	Soil & debris All others Soil & debris Non-wastewater All All others Soil & debris All others Soil & debris Non-wastewater All All others Soil and debris All others Vastewater Non-wastewater Soil & debris All All others	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 June 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Nov. 8, 1980 Nov. 8, 1980 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Aug. 8, 1990 Nov. 8, 1982 Aug. 8, 1990 Nov. 8, 1992 Aug. 8, 1992 Aug. 8, 1992
F020 F020 F021 F021 F022 F022 F023 F024 Metals dioxins/ furans F024 F026 F026 F026 F027 F027 F027 F028 F039 F039 K001 K001 lead/ organics	Soil & debris All others Soil & debris Non-westewater All All others All others Soil & debris All others All others All Soil & debris All others Soil and debris All others Soil & debris All others Non-westewater Soil & debris All	Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 June 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1989 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Aug. 8, 1980 May 8, 1982 Aug. 8, 1980 May 8, 1982 Aug. 8, 1980 Aug. 8, 1980
F020 F020 F021 F021 F022 F022 F023 F023 F024 Gioxins/ furans F024 F026 F026 F026 F027 F027 F028 F028 F039 F039 K001 K001 lead/ organics K001 K002 K003	Soil & debris All others Soil & debris Non-wastewater All All others All others Soil & debris All others All Soil & debris All others All others All others Soil and debris All others Vastewater Non-wastewater Soil & debris All All others	Nov. 8, 1988 Nov. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1980 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1990 Nov. 8, 1988 Aug. 8, 1990 May 8, 1982 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1980 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990
F020 F020 F021 F021 F022 F022 F023 F023 F024 ### dioxins/ furans F024 F026 F026 F026 F027 F027 F028 F028 F039 F039 K001 K001 lead/ organics K001 K002 K003 K004	Soil & debris All others Soil & debris Non-westewater All All others All others Soil & debris All others All others All Soil & debris All others Soil and debris All others Soil & debris All others Non-westewater Soil & debris All	Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1988 Nov. 8, 1988 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1980 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Nov. 8, 1980 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1980
F020 F020 F021 F021 F022 F022 F023 F023 F024 Gioxins/ furans F024 F026 F026 F026 F027 F027 F028 F028 F039 F039 K001 K001 lead/ organics K001 K002 K003	Soil & debris All others Soil & debris Non-wastewater All All others All others Soil & debris All others All Soil & debris All others All others All others Soil and debris All others Vastewater Non-wastewater Soil & debris All All others	Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1980 Aug. 8, 1990 Nov. 8, 1988 Aug. 8, 1990 Nov. 8, 1980 Nov. 8, 1980 Nov. 8, 1980 Nov. 8, 1988 Aug. 8, 1990 Aug. 8, 1980 Aug. 8, 1990
F020 F020 F021 F021 F022 F022 F023 F023 F024 ### dioxins/ furans F024 F026 F026 F026 F027 F027 F028 F028 F039 F039 K001 K001 lead/ organics K001 K002 K003 K004	Soil & debris All others Soil & debris Non-wastewater All All others Soil & debris All others Soil & debris All others Soil & debris All others Soil and debris All others Soil and debris All others Soil and debris All others Vastewater Non-wastewater Non-wastewater Soil & debris All All others All All others	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Nov. 8, 1988 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Aug. 8, 1990
F020 F020 F021 F021 F022 F022 F023 F023 F024 dioxins/ furans F024 F026 F026 F027 F027 F027 F027 F028 F039 K001 K001 lead/ organics K001 K002 K003 K004 K006	Soil & debris All others Soil & debris Non-westewater All All others Soil & debris All others Soil and debris All others Vestewater Non-westewater Soil & debris All All others All others All others Vestewater Non-westewater Soil & debris All others All others All others	Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1980 Nov. 8, 1980 Aug. 8, 1990 Aug. 8, 1990 Nov. 8, 1980 Nov. 8, 1980 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1980 Aug. 8, 1990
F020 F020 F021 F021 F022 F022 F023 F023 F024 dioxins/ furans F024 F026 F026 F026 F027 F027 F027 F028 F039 F039 K001 K001 lead/ organics K001 K002 K003 K004 K006 K006	Soil & debris All others Soil & debris Non-wastewater All All others Soil & debris All others Soil & debris All others Soil and debris All others Soil & debris All others	Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1988 Nov. 8, 1988 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1980 Nov. 8, 1980 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Nov. 8, 1988 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Aug. 8, 1990
F020 F020 F021 F021 F022 F022 F023 F023 F024	Soil & debris All others Soil & debris Non-wastewater All All others All others Soil & debris All others All others All others All others Soil and debris All others Vestewater Non-wastewater Soil & debris All All All All All All All All All Al	Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 June 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Nov. 8, 1988 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Aug. 8, 1990
F020 F020 F021 F021 F022 F022 F023 F023 F024 dioxins/ furans F024 F026 F026 F027 F027 F027 F028 F039 F039 K001 K001 lead/ organics K001 K002 K003 K004 K006 K006 K006 K006 K007 K008 K009	Soil & debris All others Soil & debris Non-wastewater All All others Soil & debris All others Soil & debris All others Soil and debris All others Wastewater Non-wastewater Soil & debris All All All All All All All All All Al	Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Nov. 8, 1988 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Aug. 8, 1990
F020 F020 F021 F021 F022 F022 F023 F023 F024	Soil & debris All others Soil & debris Non-westewater All All others Soil and debris All others Vestewater Non-westewater Soil & debris All others	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1990 Nov. 8, 1998 Nov. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Nov. 8, 1988 Aug. 8, 1990 Nov. 8, 1988 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Aug. 8, 1990 June 8, 1990 June 8, 1990 June 8, 1990 June 8, 1990
F020 F020 F021 F021 F022 F022 F023 F023 F024	Soil & debris All others Soil & debris Non-wastewater All All others Soil and debris All others Soil and debris All others Wastewater Non-wastewater Non-wastewater Non-wastewater Soil & debris All All All All All All All All All Al	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 June 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Nov. 8, 1988 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Aug. 8, 1989 June 8, 1989 June 8, 1989 June 8, 1989
F020 F020 F021 F021 F022 F022 F023 F024 Substitute of the state of the	Soil & debris All others Soil & debris Non-wastewater All All others Soil and debris All others Soil and debris All others Soil and debris All others Wastewater Non-wastewater Non-wastewater Soil & debris All All All All All All All All All Al	Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1980 Nov. 8, 1980 Aug. 8, 1990 Aug. 8, 1990 Nov. 8, 1988 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Aug. 8, 1990 Aug. 8, 1980 Aug. 8, 1980 Aug. 8, 1990 Aug. 8, 1991 June 8, 1989
F020 F020 F021 F021 F022 F022 F023 F023 F024	Soil & debris All others Soil & debris Non-wastewater All Soil & debris All others Soil and debris All others Hall others All others All others Soil & debris All others Soil & debris All others All others	Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 June 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Nov. 8, 1988 Aug. 8, 1990 Nov. 8, 1988 Nov. 8, 1980 Nov. 8, 1988 Nov. 8, 1990 Nov. 8, 1988 Nov. 8, 1990 Aug. 8, 1989 June 8, 1989 June 8, 1989 June 8, 1989

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	Soil & debris	June 8, 1991
K011	Wastewater	Aug. 8, 1990
K013	Non-wastewater	June 8, 1989
K013	Soil & debris	June 8, 1991
K013 K014	Wastewater	Aug. 8, 1990 June 8, 1989
K014	Non-wastewater	June 8, 1991
K014	Soil & debris	Aug. 8, 1988
K015	Wastewater	Aug. 8, 1990
K016	Non-wastewater	Aug. 8, 1990
K016	Soil & debris	Aug. 8, 1990
K017	All others	Aug. 8, 1990
K018	Soil & debris	Aug. 8, 1988
K018	All others	Aug. 8, 1990
K019	Soil & debris	Aug. 8, 1988
K019	All others Soil & debris	Aug. 8, 1990
K020	All others	Aug. 8, 1988
K020	All	Aug. 8, 1990
K021	Wastewater	Aug. 8, 1990
K022	Non-wastewater	Aug. 8, 1988
K022	Soil & debris	Aug. 8, 1990
K022		June 8, 1991
K023	Soil & debris	June 8, 1989
K023	All others	Aug. 8, 1990
K024	Soil & debris	Aug. 8, 1988
K024	All others	Aug. 8, 1990
K026	All	Aug. 8, 1990
K026	All	June 8, 1991
K027	Soil & debris	June 8, 1989
K027	All others	June 8, 1991
K028	Soil & debris	Aug. 8, 1990
K028 metals	Non-wastewater	June 8, 1989
8	All others	Aug. 8, 1990
	Wastewater Non-wastewater	June 8, 1989
29	Soil & debris	June 8, 1991
K029	Soil & debris	Aug. 8, 1990
K030	All others	Aug. 8, 1988
K030	Wastewater	Aug. 8, 1990
K031	Non-wastewater	May 8, 1992
K031 K032	Ali	Aug. 8, 1990
K032	Alt	Aug. 8, 1990 Aug. 8, 1990
K034	All	Aug. 8, 1990
K035	All	Aug. 8, 1990
K036	all	Aug. 8, 1990
K037	Soil & debris	Aug. 8, 1990
K037	Wastewater	Aug. 8, 1988
K037	All others	June 8, 1991
K038	Soil & debris	June 8, 1989
K038	All others	June 8, 1991
K039	Soil & debris	June 8, 1989
K039	All others Soil & debris	June 8, 1991
K040	All others	June 8, 1989
K040	All	Aug. 8, 1990
K041	All	Aug. 8, 1990
K042	Soil & debris	Aug. 8, 1988
K043	All others	Aug. 8, 1990
	All	Aug. 8, 1990
	All	Aug. 8, 1990
K046	Nonreactive non-wastewater	Aug. 8, 1988 Aug. 8, 1990
K046	All others	Aug. 8, 1990
K047	All	Aug. 8, 1990
K048	Wastewater	Nov. 8, 1990
K048	Non-wastewater	Aug. 8, 1990
K049	Wastewater	Nov. 8, 1990
K049	Non-wastewater	Aug. 8, 1990
K050	Wastewater	Nov. 8, 1990
K060	Nor-wastewater	Aug. 8, 1990
K061	Wastewater	Nov. 8, 1990
K061	Non-wastewater	Aug. 8, 1990
K052	Wastewater	Nov. 8, 1990
K062	Non-wastewater All	Aug. 8, 1990
K060	Wastewater	Aug. 8, 1990
K061	Non-wastewater	Aug. 8, 1988
K061	All	Aug. 8, 1988
K062	All	Aug. 8, 1990
K069	All	Aug. 8, 1990
K073	All	Aug. 8, 1990
K083	Wastewater	May 8, 1992
K084 K084	Non-wastewater	Aug. 8, 1990
K084 K085	All	Aug. 8, 1990
K086	All	Aug. 8, 1990 Aug. 8, 1990
K087	Soil & debris	Aug. 8, 1990 Aug. 8, 1988
K087	All others	June 8, 1991
K093	Soil and debris	Julie 0, 1881

K093	All others	June 8, 1989
K094	Soil & debris	June 8, 1991
K094	All others	June 8, 1989
K095	wastewater	Aug. 8, 1990
K095	Non-wastewater	June 8, 1989
K095	Soil & debris	June 8, 1991
K096	Wastewater	Aug. 8, 1990
K096	Non-wastewater	June 8, 1989
K096	Soil & debris	June 8, 1991
K097	All	Aug. 8, 1990
K098	All	Aug. 8, 1990
K099	All	Aug. 8, 1988
K100	All	Aug. 8, 1990
K101	Wastewater	Aug. 8, 1988
K101	Non-wastewater	May 8, 1992
K102	Wastewater	Aug. 8, 1988
K102	Non-wastewater	May 8, 1992
K103	Soil & debris	Aug. 8, 1990
K103	All others	Aug. 8, 1988
K104	Soil and debris	Aug. 8, 1990
K014	All others	Aug. 8, 1988
K105	All	Aug. 8, 1990
K106	High mercury non-wastewater	May 8, 1992
K106	Low mercury non-wastewater	May 8, 1992
K106	All others	Aug. 8, 1990
K113	Soil & debris	June 8, 1991
K113	All others	June 8, 1989
K114	Soil & debris	June 8, 1991
K114	All others	June 8, 1989
K116	Soil & debris	June 8, 1991
K116	All others	June 8, 1989
K116	Soil & debris	June 8, 1991
6	All others	June 8, 1989

5004	All	Aug. 8, 1990
P001 P002	All	Aug. 8, 1990 Aug. 8, 1990
P003	All	Aug. 8, 1990
P004	All	Aug. 8, 1990
P006	All	Aug. 8, 1990
P006	All	Aug. 8, 1990
P007 P008	All	Aug. 8, 1990 Aug. 8, 1990
P009	All	Aug. 8, 1990
P010	Wastewater	May 8, 1992
P010	Non-wastewater Wastewater	Aug. 8, 1990
P011	Non-wastewater	May 8, 1992
P011	Wastewater	Aug. 8, 1990
P012 P012	Non-westewater	May 8, 1992 Aug. 8, 1990
P013	Ali	Aug. 8, 1990
P014	All	Aug. 8, 1990
P016	All	Aug. 8, 1990
P016	All	Aug. 8, 1990
P017	All	Aug. 8, 1990
P018 P020	All	Aug. 8, 1990 June 8, 1989
P020	All	Aug. 8, 1990
P022	All	Aug. 8, 1990
P023	All	Aug. 8, 1990
P024	All	Aug. 8, 1990
P026	All	Aug. 8, 1990
P027	All	Aug. 8, 1990
P028 P029	All	June 8, 1989 June 8, 1989
P030	All	Aug. 8, 1990
P031	All	Aug. 8, 1990
3	All	Aug. 8, 1990
4	All Wastewater	Aug. 8, 1990
P036	Non-wastewater	May 8, 1992
P036 P037	All	Aug. 8, 1990 Aug. 8, 1990
P038	Wastewater	May 8, 1992
P038	Non-wastewater	June 8, 1991
PO39	Soil & debris All others	June 8, 1989
PO39	Soil and debris	June 8, 1991
P040	All others	June 8, 1989
P040 P041	Soil land debris	June 8, 1991 June 8, 1989
P041	All others	Aug. 8, 1990
P042	All	June 8, 1991
P043	Soil & debris	June 8, 1989
P043	All others Soil & debris	June 8, 1991
P044	All others	June 8, 1989
P044 P045	All	Aug. 8, 1990 Aug. 8, 1990
P046	All	Aug. 8, 1990
P047	All	Aug. 8, 1990
P048	All	Aug. 8, 1990
P049	All All	Aug. 8, 1990
P060	All	Aug. 8, 1990
P051	All	Aug. 8, 1990 Aug. 8, 1990
6	All	Aug. 8, 1990
7067	All	Aug. 8, 1990
P058	All	Aug. 8, 1990
P069	All All	Aug. 8, 1990
P060	Soil & debris	June 8, 1991
P062 P062	All others	June 8, 1989
P063	All	June 8, 1989 Aug. 8, 1990
P064	All	May 8, 1992
P065	High mercury non-wastewater	May 8, 1992
P065	Low mercury non-wastewater	Aug. 8, 1990
P066	All others All	Aug. 8, 1990
P066	All	Aug. 8, 1990
P067 P068	All	Aug. 8, 1990
P069	All	Aug. 8, 1990 Aug. 8, 1990
P070-	All	June 8, 1991
P071	Soil & debris	June 8, 1989
P071	All others	Aug. 8, 1990
P072	All All	Aug. 8, 1990
P073	All	June 8, 1989
P074	Ali	Aug. 8, 1990
P075 P076	All	Aug. 8, 1990 Aug. 8, 1990
P077	All	Aug. 8, 1990
P078	All	Aug. 8, 1990
P081	All	Aug. 8, 1990
P082	All	Aug. 8, 1990
P084	All	

P086	June 8, 199 May 8, 1992 Aug. 8, 199 June 8, 199 Aug. 8, 199 June 8, 199 Aug. 8, 199 Aug. 8, 199 June 8, 198 Aug. 8, 199 Aug. 8, 199 June 8, 198 June 8, 198 June 8, 199 June 8
P086	June 8, 1981 May 8, 1992 Aug. 8, 1992 June 8, 1993 June 8, 1993 Aug. 8, 1992 Aug. 8, 1992 Aug. 8, 1993 June 8, 1994 Aug. 8, 1996 Aug. 8, 1996 June 8, 1981 June 8, 1983 June 8, 1983 Aug. 8, 1996 June 8, 1988 Aug. 8, 1996 June 8, 1998
PO87	May 8, 1992 Aug. 8, 1995 June 8, 1995 May 8, 1992 May 8, 1992 Aug. 8, 1996 Aug. 8, 1997 June 8, 1998 Aug. 8, 1996 Aug. 8, 1996 June 8, 1986 Aug. 8, 1996 June 8, 1986 Aug. 8, 1996 June 8, 1986 Aug. 8, 1996 June 8, 1988 Aug. 8, 1996 June 8, 1989 June 8, 1989 Aug. 8, 1996 June 8, 1999
P088	Aug. 8, 1996 June 8, 1999 June 8, 1999 May 8, 1992 Aug. 8, 1993 June 8, 1993 June 8, 1993 June 8, 1993 June 8, 1996 Aug. 8, 1996 June 8, 1988 Aug. 8, 1996 June 8, 1989 June 8, 1989 June 8, 1989 Aug. 8, 1996 June 8, 1998
P088	June 8, 199 June 8, 1988 May 8, 1992 May 8, 1992 Aug. 8, 1992 June 8, 1993 June 8, 1992 Aug. 8, 1992 Aug. 8, 1992 June 8, 1993 June 8, 1993 June 8, 1993 June 8, 1994 June 8, 1995 June 8, 1995 June 8, 1996 Aug. 8, 1996 Aug. 8, 1996 Aug. 8, 1996 Aug. 8, 1996 June 8, 1988 Aug. 8, 1996 June 8, 1998
P088	June 8, 1981 May 8, 1992 May 8, 1992 Aug. 8, 1995 Aug. 8, 1995 June 8, 1995 June 8, 1996 Aug. 8, 1996 Aug. 8, 1996 Aug. 8, 1996 June 8, 1986 June 8, 1996
P092	May 8, 1992 May 8, 1992 Aug. 8, 1993 Aug. 8, 1993 June 8, 1993 Aug. 8, 1994 Aug. 8, 1995 Aug. 8, 1996 June 8, 1988 Aug. 8, 1996 June 8, 1988 Aug. 8, 1996 June 8, 1989 Aug. 8, 1996 June 8, 1999 June 8, 1998
P092	May 8, 1992 Aug. 8, 1995 Aug. 8, 1995 Aug. 8, 1995 Aug. 8, 1995 Aug. 8, 1996
P093	Aug. 8, 1992 Aug. 8, 1992 Aug. 8, 1992 June 8, 1993 June 8, 1993 Aug. 8, 1996 Aug. 8, 1996 June 8, 1981 June 8, 1981 June 8, 1982 June 8, 1986 Aug. 8, 1996 June 8, 1988 Aug. 8, 1996 June 8, 1988 Aug. 8, 1996 June 8, 1988 Aug. 8, 1996 June 8, 1998 Aug. 8, 1999 June 8, 1998
P093	May 8, 1992 Aug. 8, 1997 June 8, 1997 June 8, 1997 Aug. 8, 1997 Aug. 8, 1997 June 8, 1998 June 8, 1998 June 8, 1998 June 8, 1998 Aug. 8, 1999 Aug. 8, 1998 Aug. 8, 1999 Aug. 8, 1998 Aug. 8, 1999 June 8, 1988 Aug. 8, 1999 June 8, 1988 Aug. 8, 1999 June 8, 1988 Aug. 8, 1999 June 8, 1998 Aug. 8, 1999 June 8, 1998
P094	Aug. 8, 1990 June 8, 1991 Aug. 8, 1992 Aug. 8, 1992 June 8, 1981 Aug. 8, 1992 June 8, 1981 Aug. 8, 1992 June 8, 1981 Aug. 8, 1992 June 8, 1982 Aug. 8, 1992 June 8, 1993
P094	June 8, 1993 June 8, 1993 Aug. 8, 1994 Aug. 8, 1995 June 8, 1995 June 8, 1995 June 8, 1995 June 8, 1996 Aug. 8, 1996 June 8, 1995
P096	June 8, 1981 May 8, 1992 Aug. 8, 1992 Aug. 8, 1993 June 8, 1981 June 8, 1981 June 8, 1981 June 8, 1982 Aug. 8, 1996 June 8, 1988 June 8, 1989 June 8, 1989 June 8, 1999 June 8, 1998
P096	May 8, 1992 Aug. 8, 1996 Aug. 8, 1996 June 8, 1991 June 8, 1981 June 8, 1981 June 8, 1981 June 8, 1982 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1988 Aug. 8, 1990 June 8, 1992 Aug. 8, 1990 June 8, 1992 June 8, 1992 June 8, 1992 June 8, 1992 June 8, 1995
P096	Aug. 8, 1990 June 8, 1981 June 8, 1981 June 8, 1981 Aug. 8, 1990 June 8, 1981 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1981 June 8, 1982 Aug. 8, 1990 June 8, 1991 June 8, 1992 June 8, 1991 June 8, 1992 June 8, 1995
P097 Soil & debris	Aug. 8, 1990 June 8, 1981 June 8, 1981 Aug. 8, 1990 June 8, 1981 June 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1981 June 8, 1982 Aug. 8, 1990 June 8, 1990
PO98	June 8, 199; June 8, 198; June 8, 198; June 8, 1996; June 8, 1996; Aug. 8, 1996; Aug. 8, 1996; Aug. 8, 1996; June 8, 1986; June 8, 1986; Aug. 8, 1996; June 8, 1998;
PO98 All	June 8, 1981 June 8, 1981 June 8, 1981 June 8, 1981 June 8, 1982 Aug. 8, 1990 Aug. 8, 1990 June 8, 1982 June 8, 1982 June 8, 1982 June 8, 1982 June 8, 1992
P099 silver Wastewater P098 cyanides Wastewater P098 cyanides Wastewater P098 cyanides Non-wastewater Silver All P102 All P103 All P104 silver Wastewater P104 cyanides Wastewater P104 cyanides Wastewater P104 cyanides Wastewater P105 All All Soil & debris All Cohers Silver P108 All others P109 Soil and debris P109 All others P110 All P111 Soil & debris P111 All others P112 All P113 All P114 All P115 All P116 All P116 Soil & debris P116 Soil & debris P116 Soil & debris P116 All P	June 8, 1986 Aug. 8, 1996 June 8, 1988 Aug. 8, 1996 Aug. 8, 1996 Aug. 8, 1996 Aug. 8, 1996 June 8, 1988 Aug. 8, 1996 June 8, 1995 June 8, 1991 June 8, 1995
P099 silver Wastewater P098 cyanides Wastewater P098 cyanides Wastewater P098 cyanides Non-wastewater Silver All P102 All P103 All P104 silver Wastewater P104 cyanides Wastewater P104 cyanides Wastewater P104 cyanides Wastewater P105 All All Soil & debris All Cohers Silver P108 All others P109 Soil and debris P109 All others P110 All P111 Soil & debris P111 All others P112 All P113 All P114 All P115 All P116 All P116 Soil & debris P116 Soil & debris P116 Soil & debris P116 All P	Aug. 8, 1990 June 8, 1981 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1980 June 8, 1990
P099 cyanides Wastewater	Aug. 8, 1990 June 8, 1981 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1980 June 8, 1990
Silver S	June 8, 1986 Aug. 8, 1996 Aug. 8, 1996 Aug. 8, 1996 Aug. 8, 1996 June 8, 1988 Aug. 8, 1996 June 8, 1988 Aug. 8, 1990 June 8, 1998 Aug. 8, 1990 June 8, 1995 June 8, 1995 June 8, 1996 June 8, 1996 June 8, 1996 June 8, 1996
Pilot	Aug. 8, 1996 Aug. 8, 1996 Aug. 8, 1996 Aug. 8, 1996 Aug. 8, 1998 June 8, 1988 Aug. 8, 1996 June 8, 1998 Aug. 8, 1990 June 8, 1998 Aug. 8, 1990 June 8, 1996 June 8, 1998
P101	Aug. 8, 1996 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 June 8, 1985 June 8, 1995 June 8, 1992 Aug. 8, 1990 June 8, 1991 June 8, 1995 June 8, 1991 June 8, 1995
P102 P103 All P104 silver Vwstewater P104 cyanides Vwstewater P104 cyanides/ silver P106 All All Soil & debris All others P109 P109 All others P110 All P111 Soil & debris P111 All others P111 All others P112 All P113 All P114 All P115 All P116 Soil & debris All Others	Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1980 June 8, 1980 June 8, 1980 June 8, 1980 May 8, 1990 June 8, 1991 June 8, 1990 June 8, 1990 June 8, 1990 June 8, 1990
P103	Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1980 June 8, 1980 June 8, 1980 June 8, 1980 May 8, 1990 June 8, 1991 June 8, 1990 June 8, 1990 June 8, 1990 June 8, 1990
P104 silver Wastewater P104 cyanides Wastewater P104 cyanides/ Non-wastewater silver P106 All All Soil & debris All others P109 Soil and debris P100 All P110 All P111 Soil & debris P111 All others P112 All P113 All P114 All P115 All P116 Soil & debris P116 Soil & debris P116 Soil & debris P116 Soil & debris	Aug. 8, 1990 June 8, 1988 June 8, 1988 June 8, 1988 Aug. 8, 1992 Aug. 8, 1992 June 8, 1992 June 8, 1992 June 8, 1992 June 8, 1995
P104 cyanides	Aug. 8, 1990 June 8, 1986 June 8, 1990 June 8, 1992 Aug. 8, 1992 Aug. 8, 1990 June 8, 1991 June 8, 1995 June 8, 1995 June 8, 1995
P104 cyanides/ silver All All Soil & debris All others P109 Soil and debris P110 All P111 Soil & debris P111 Soil & debris P112 All P113 All P114 All P115 All P116 Soil & debris P116 Soil & debris All others	June 8, 1986 Aug. 8, 1996 June 8, 1986 May 8, 1992 Aug. 8, 1997 June 8, 1991 June 8, 1992 June 8, 1995 June 8, 1997 June 8, 1998
P104 cyanides/ silver All All Soil & debris All others P109 Soil and debris P110 All P111 Soil & debris P111 Soil & debris P112 All P113 All P114 All P115 All P116 Soil & debris P116 Soil & debris All others	June 8, 1986 Aug. 8, 1990 June 8, 1982 Aug. 8, 1990 June 8, 1991 June 8, 1998 Aug. 8, 1990 June 8, 1991 June 8, 1998
P106	Aug. 8, 1996 June 8, 1982 May 8, 1992 Aug. 8, 1990 June 8, 1998 Aug. 8, 1990 June 8, 1990 June 8, 1991
All Soil & debris P108 All others P109 Soil and debris P109 All others P110 All P111 Soil & debris P111 All others P112 All P113 All P114 All P115 All P116 Soil & debris P116 All others	June 8, 1989 May 8, 1992 Aug. 8, 1990 June 8, 1991 June 8, 1998 Aug. 8, 1990 June 8, 1991 June 8, 1989
Soil & debris	June 8, 1989 May 8, 1992 Aug. 8, 1990 June 8, 1991 June 8, 1998 Aug. 8, 1990 June 8, 1991 June 8, 1989
P108 All others P109 Soil and debris P109 All others P110 All P111 Soil & debris P112 All P113 All P114 All P115 All P116 Soil & debris P116 All others	May 8, 1992 Aug. 8, 1990 June 8, 1991 June 8, 1990 Aug. 8, 1990 June 8, 1991 June 8, 1988
P109 Soil and debris P109 All others P110 All P111 Soil & debris P111 All others P112 All P113 All P114 All P115 All P116 Soil & debris P116 Soil & debris	Aug. 8, 1990 June 8, 1991 June 8, 1988 Aug. 8, 1990 June 8, 1991 June 8, 1988
P109 All others P110 All P111 Soil & debris P111 All others P112 All P113 All P114 All P115 All P116 Soil & debris P116 All others	June 8, 1991 June 8, 1988 Aug. 8, 1990 June 8, 1991 June 8, 1988
P110 All P111 Soil & debris P111 All others P112 All P113 All P114 All P115 All P116 Soil & debris P116 All others	June 8, 1988 Aug. 8, 1990 June 8, 1991 June 8, 1988
P111 Soil & debris P111 All others P112 All P113 All P114 All P115 All P116 Soil & debris P116 All others	Aug. 8, 1990 June 8, 1991 June 8, 1989
P111 All others P112 All P113 All P114 All P115 All P116 Soil & debris P116 All others	June 8, 1991 June 8, 1989
P112 All P113 All P114 All P115 All P116 Soil & debris P116 All others	June 8, 1989
P113 All P114 All P115 All P116 Soil & debris P116 All others	
P114 All P115 All P116 Soil & debris P116 All others	Aug. 8, 1990
P116 All P116 Soil & debris P116 All others	Aug. 8, 1990
P116 Soil & debris P116 All others	Aug. 8, 1990
P116 All others	Aug. 8, 1990
	May 8, 1992
	Aug. 8, 1990
P118 Soil & debris	May 8, 1992
P118 All others	Aug. 8, 1990
P119 Ali	Aug. 8, 1990
P120 Ali	Aug. 8, 1990
P121 All	June 8, 1989
P122 All	Aug. 8, 1990
P123 All	Aug. 8, 1990
U001 All	Aug. 8, 1990
U002 All	Aug. 8, 1990
U003 Soil & debris	May 8, 1992
U003 All others	Aug. 8, 1990
All All	Aug. 8, 1990
5 All	Aug. 8, 1990
Soil & debris	May 8, 1992
U006 All others	Aug. 8, 1990
U007 Soil & debris	May 8, 1992
U007 All others	Aug. 8, 1990
UOO8 AII	Aug. 8, 1990
UO09 Ali	A
UO10 Soil & debris	Aug. 8, 1990
U010 All others	Aug. 8, 1990 May 8, 1992
UO11 Soil & debris	
UO11 All others	May 8, 1992
T 157 T 1	May 8, 1992 Aug. 8, 1990
UO12 All	May 8, 1992 Aug. 8, 1990 May 8, 1992
U014 Soil & debris	May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990
U014 Soil & debris U014 All others	May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 Aug. 8, 1990
U014 Soil & debris U014 All others U015 Soil & debris	May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 Aug. 8, 1990 May 8, 1992
U014 Soil & debris U014 All others U015 Soil & debris U015 All others	May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990
U014 Soil & debris U014 All others U015 Soil & debris U016 All others U016 All	May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 May 8, 1992
U014 Soil & debris U014 All others U015 Soil & debris U015 All others U016 All others U017 Soil & debris	May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 Aug. 8, 1990 May 8, 1992 Aug. 8, 1992 Aug. 8, 1990
U014 Soil & debris U014 All others U015 Soil & debris U015 All others U016 All others U017 Soil & debris U017 All others	May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990
U014 Soil & debris U014 All others U015 Soil & debris U016 All others U017 Soil & debris U017 All others U018 All	May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 Aug. 8, 1990 May 8, 1992
U014 Soil & debris U014 All others U015 Soil & debris U016 All others U017 Soil & debris U017 All others U018 All U019 All	May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 Aug. 8, 1990
U014 Soil & debris U014 All others U015 Soil & debris U016 All others U016 All U017 Soil & debris U017 All others U018 All U019 All U020 Soil & debris	May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 Aug. 8, 1992 Aug. 8, 1990
U014 Soil & debris U014 All others U015 Soil & debris U016 All others U017 Soil & debris U017 All others U018 All U019 All U020 Soil & debris U020 All others	May 8, 1992 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990 Aug. 8, 1990
U014 Soil & debris U014 All others U015 Soil & debris U016 All others U016 All others U017 Soil & debris U017 Soil & debris U019 All U019 All U020 Soil & debris U020 All others U021 Soil & debris	May 8, 1992 Aug. 8, 1990 May 8, 1992
U014 Soil & debris U014 All others U015 Soil & debris U016 All others U016 All others U017 Soil & debris U017 All others U018 All U019 All U020 Soil & debris U020 All others U021 Soil & debris U021 All others	May 8, 1992 Aug. 8, 1990
U014 Soil & debris U014 All others U015 Soil & debris U016 All others U016 All U017 Soil & debris U017 All others U018 All U019 All U020 Soil & debris U020 All others U021 Soil & debris U022 All others	May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 May 8, 1992
U014 Soil & debris U014 All others U015 Soil & debris U016 All others U017 Soil & debris U017 All others U018 All U019 All U020 Soil & debris U020 All others U021 Soil & debris U022 All U022 All U022 All	May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990
U014 Soil & debris U014 All others U015 Soil & debris U016 All others U016 All others U017 Soil & debris U017 All others U018 All U019 All U020 Soil & debris U020 All others U021 Soil & debris U021 All others U022 All U023 All U023 All	May 8, 1992 Aug. 8, 1990
U014 Soil & debris U014 All others U015 Soil & debris U016 All others U017 Soil & debris U017 All others U018 All U019 All U020 Soil & debris U020 All others U021 Soil & debris U022 All U022 All U022 All	May 8, 1992 Aug. 8, 1990 May 8, 1992 Aug. 8, 1990

May 8, 1992 Soil & debris Aug. 8, 1990 U026 All others U026 Aug. 8, 1990 All U027 June 8, 1991 Soil & debris U028 June 8, 1989 All others Aug. 8, 1990 U028 Ali Aug. 8, 1990 UO29 Αll U030 Aug. 8, 1990 Αll U031 Aug. 8, 1990 Αll May 8, 1992 U032 Soil & debris U033 Aug. 8, 1990 All others U033 May 8, 1992 Soil & debris U034 Aug. 8, 1990 All others May 8, 1992 U034 Soil & debris Aug. 8, 1990 U036 All others U036 Aug. 8, 1990 All U036 Aug. 8, 1990 U037 May 8, 1992 Soil & debris U038 Aug. 8, 1990 All others U038 Aug. 8, 1990 All U039 May 8, 1992 Soil & debris Aug. 8, 1990 U041 All others May 8, 1992 UO41 Soil & debris U042 Aug. 8, 1990 All others Aug. 8, 1990 U042 All Aug. 8, 1990 U043 All Aug. 8, 1990 U044 All U045 May 8, 1992 Soil & debris Aug. 8, 1990 U046 All others U046 Aug. 8, 1990 All Aug. 8, 1990 U047 All U048 May 8, 1992 Soil & debris U049 Aug. 8, 1990 All others Aug. 8, 1990 Ali Aug. 8, 1990 All Aug. 8, 1990 All U052 Aug. 8, 1990 All U053 Aug. 8, 1990 All U055 Aug. 8, 1990 Ali U066 Aug. 8, 1990 All U057 June 8, 1992 Soil & debris U058 June 8, 1989 All others U058 May 8, 1992 Soil & debris U059 Aug. 8, 1990 All others **UO59** May 8, 1992 Soil & debris U060 Aug. 8, 1990 All others U060 May 8, 1992 Soil & debris U061 Aug. 8, 1990 All others U061 May 8, 1992 Soil & debris U062 Aug. 8, 1990 All others U062 Aug. 8, 1990 All U063 Aug. 8, 1990 Ali U064 Aug. 8, 1990 All U066 Aug. 8, 1990 All U067 Aug. 8, 1990 All U068 June 8, 1991 Soil & debris U069 June 8, 1989 All others Aug. 8, 1990 All Aug. 8, 1990 All Aug. 8, 1990 ΑII U072 May 8, 1992 Soil & debris U073 Aug. 8, 1990 All others U073 May 8, 1992 Soil & debris U074 Aug. 8, 1990 All others U074 Aug. 8, 1990 All Ú076 Aug. 8, 1990 Αli U076 Aug. 8, 1990 All U077 Aug. 8, 1990 All U078 Aug. 8, 1990 All U079 Aug. 8, 1990 Αli 0080 Aug. 8, 1990 All U081 Aug. 8, 1990 All U082 Aug. 8, 1990 All U083 Aug. 8, 1990 All U084 Aug. 8, 1990 All U085 Aug. 8, 1990 All U086 June 8, 1991 Soil & debris U087 June 8, 1989 All others U087 June 8, 1991 Soil & debris U088 June 8, 1989 All others U088 Aug. 8, 1990 All U089 Aug. 8, 1990 All 0090 May 8, 1992 Soil & debris U091 Aug. 8, 1990 All others U091 May 8, 1992 Soil & debris Aug. 8, 1990 U092 All others U092

U093	Soil & debris	May 8, 1992
U093	All others	Aug. 8, 1990
UO94	All	Aug. 8, 1990
U095	Soil & debris	May 8, 1992
U095	All others	Aug. 8, 1990
U096	All	Aug. 8, 1990
U097	Soil & debris	May 8, 1992
U097	All others	Aug. 8, 1990
U098	All	Aug. 8, 1990
U099	All	Aug. 8, 1990
U101	All	Aug. 8, 1990
U102	Soil & debris	June 8, 1991
U102	All others	June 8, 1989
U103	All	Aug. 8, 1990
U106	All	Aug. 8, 1990
U106	All .	Aug. 8, 1990
U107	Soil & debris	June 8, 1991
U107	All others	June 8, 1989
U108	All	Aug. 8, 1990
UO19	All	Aug. 8, 1990
U110	Soil & debris	May 8, 1992
U110	All others	Aug. 8, 1990
U111	All	Aug. 8, 1990
U112	All	Aug. 8, 1990
U113	All	Aug. 8, 1990
U114	Soil & debris	May 8, 1992
U114	All others	Aug. 8, 1990
U115	. All	Aug. 8, 1990
U116	Soil & debris	May 8, 1992
U116	All others	Aug. 8, 1990
U117	Ali	Aug. 8, 1990
U118	Ail	Aug. 8, 1990
6	Soil & debris	May 8, 1992
	All others	Aug. 8, 1990
0120	All	Aug. 8, 1990
U121 .	All	Aug. 8, 1990
U122	All	Aug. 8, 1990
U123	All	Aug. 8, 1990
U124	Ali	Aug. 8, 1990
U126	All	Aug. 8, 1990
U126	All	Aug. 8, 1990
U127	All	Aug. 8, 1990
U128	All	Aug. 8, 1990
U129	All	Aug. 8, 1990
U130	Soil & debris	May 8, 1992
U130	All others	Aug. 8, 1990
U131	All	Aug. 8, 1990
U132 U132	Soil & debris	May 8, 1992
U133	All others	Aug. 8, 1990
U134	Ali Ali	Aug. 8, 1990
U135	All	Aug. 8, 1990
0.30	All .	Aug. 8, 1990

		Masternatar	Aug. 8, 1990
U136		Wastewater Non-wastewater	May 8, 1992
U136			Aug. 8, 1990
U137		All	Aug. 8, 1990
U138		All	Aug. 8, 1990
U140		All All	Aug. 8, 1990
U141		All	Aug. 8, 1990
U142		Soil & debris	May 8, 1992
U143		All others	Aug. 8, 1990
U143		All	Aug. 8, 1990
U144		All	Aug. 8, 1990
U145		All	Aug. 8, 1990
U146		All	Aug. 8, 1990
U147		Soil & debris	May 8, 1992
U148		All others	Aug. 8, 1990
U148		Soil & debris	May 8, 1992
U149		All others	Aug. 8, 1990
U149		Soil & debris	May 8, 1992
U150		All others	Aug. 8, 1990
U160		High mercury non-wastewater	May 8, 1992 May 8, 1992
U161		Low mercury non-wastewater	May 8, 1992
U161		Soil & debris	
U161		All others	Aug. 8, 1990
U161		All	Aug. 8, 1990
U152		Soil & debris	May 8, 1992 Aug. 8, 1990
U163		All others	Aug. 8, 1990
U163		All	Aug. 8, 1990
U164		All	May 8, 1992
U166		Soil and debris	Aug. 8, 1990
U156		All others	Aug. 8, 1990
U166		All	Aug. 8, 1990
U167		All	Aug. 8, 1990
U168		All	Aug. 8, 1990
		All	Aug. 8, 1990
0161		All	Aug. 8, 1990
U162		All	May 8, 1992
U163		Soil and debris	Aug. 8, 1990
U163		All others	May 8, 1992
U164		Soil and debris	Aug. 8, 1990
U164		All others	Aug. 8, 1990
U165		All	Aug. 8, 1990
U166		All	May 8, 1992
U167		Soil and debris	Aug. 8, 1990
U167		All others	May 8, 1992
U168	•	Soil and debris	Aug. 8, 1990
U168		All others	Aug. 8, 1990
U169		All	Aug. 8, 1990
U170		All	May 8, 1992
U171		Soil and debris	Aug. 8, 1990
U171		All others	Aug. 8, 1990
U172		All	May 8, 1992
U173		Soil and debris	Aug. 8, 1990
U173		All others	Aug. 8, 1990
U174	•	All	May 8, 1992
U176		Soil and debris	Aug. 8, 1990
U176		All others	May 8, 1992
U177		Soil and debris	Aug. 8, 1990
77		All others	May 8, 1992
8		Soil & debris	Aug. 8, 1990
178		All others	Aug. 8, 1990
U179		All	Aug. 8, 1990
U180		All	Aug. 8, 1990
U181		All	Aug. 8, 1990
U182		All	Aug. 8, 1990
U183		All	May 8, 1992
U184		Soil & debris	Aug. 8, 1990
U184		All others	Aug. 8, 1990
U185		All	Aug. 8, 1990
U186		All	Aug. 8, 1990
U187		All	Aug. 8, 1990
U188		All	Aug. 8, 1990
U189		All	June 8, 1991
U190		Soil & debris	June 8, 1989
U190		All others	May 8, 1992
U191		Soil and debris	. Aug. 8, 1990
U191		All others	Aug. 8, 1990
U192		All	May 8, 1992
U193		Soil and debris	Aug. 8, 1990
U193		All others	May 8, 1992
U194		Soil and debris	Aug. 8, 1990
U194		All others	Aug. 8, 1990
U196		All	Aug. 8, 1990
U197		All	May 8, 1992
U200		Soil and debris	Aug. 8, 1990
U200		All others	Aug. 8, 1990
U201		All	May 8, 1992
U202		Soil and debris	

U202	All others	Aug. 8, 1990
U203	All	Aug. 8, 1990
U204	All	Aug. 8, 1990
U206	All	Aug. 8, 1990
U206	Soil and debris	May 8, 1992
U206	All others	Aug. 8, 1990
U207	All	Aug. 8, 1990
U208	All	Aug. 8, 1990
U209	All	Aug. 8, 1990
U210	All	Aug. 8, 1990
U211	All	Aug. 8, 1990
U213	All .	Aug. 8, 1990
U214	All	Aug. 8, 1990
U216	All	Aug. 8, 1990
U216	All	Aug. 8, 1990
U217	All	Aug. 8, 1990
U218	Soil and debris	May 8, 1992
U218	All others	Aug. 8, 1990
U219	Soil and debris	May 8, 1992
U219	All others	Aug. 8, 1990
U220	All	Aug. 8, 1990
U221	Soil and debris	June 8, 1991
U221	All others	June 8, 1989
U222	Soil and debris	May 8, 1992
U222	All others	Aug. 8, 1990
U223	Soil and debris	June 8, 1991
U223	All others	June 8, 1989
U225	All	Aug. 8, 1990
U226	All	Aug. 8, 1990
U227	All	Aug. 8, 1990
U228		Aug. 8, 1990
4	Soil and debris All others	May 8, 1992
0236	Soil and debris	Aug. 8, 1990
	All others	June 8, 1991
U236 U236	Soil and debris	June 8, 1989
U236	All others	May 8, 1992
U237	Soil and debris	Aug. 8, 1990 May 8, 1992
U237	All others	Aug. 8, 1990
U238	Soil and debris	May 8, 1992
U238	All others	Aug. 8, 1990
U239	All	Aug. 8, 1990
U240	Soil and debris	May 8, 1992
U240	All others	Aug. 8, 1990
U243	All	Aug. 8, 1990
U244	Soil and debris	May 8, 1992
U244	All others	Aug. 8, 1990
U246	All	Aug. 8, 1990
U247	All	Aug. 8, 1990
U248	All	Aug. 8, 1990
U249	All	Aug. 8, 1990

JULY 16, 1993

LETTER FROM VIRGINIA DEPARTMENT OF WASTE MANAGEMENT TO REHRIG INTERNATIONAL



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

JUL 1 6 1993

Mr. Paul Bauz, Plating Manager Rehrig International 901 N. Lombardy Street Richmond, Virginia 23220

RE: RCRA Compliance Inspection

EPA ID# VAD089028377

Dear Mr. Bauz:

Thank you for your letter dated June 23, 1993 describing the steps taken to bring your facility into compliance with the Virginia Hazardous Waste Management Regulations (VHWMR). I have completed a review of the information submitted and have made comments on each item below.

- 1. The new racks added to the less than 90-day accumulation area as shown in the pictures provided with your letter are impressive. These more than satisfy the aisle space requirements of VHWMR §9.2.E. The rapid and thorough corrective actions taken here demonstrate a commendable willingness to make more than minimal improvements to hazardous waste management procedures.
- Submission of the updated plant layout drawing constitutes proper notification of the Director of all waste accumulation areas.
- The amendment to the facility contingency plan contains the elements requested.

As a result, your facility has been found to be in compliance with the VHWMR for the May 13, 1993 RCRA Compliance Inspection.

Thank you for your timely response. If I can be of any further assistance please call me at (804) 786-7111.

Sincerely

Robert Lincoln

Analytical Chemist

cc: Glenn Moore

Clair Slaughter

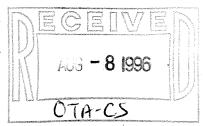
930713 OCE

James Monroe Building, Eleventh Floor ● 101 North Fourteenth Street ● Richmond, Virgimia 23219

AUGUST 8, 1996

LETTER FROM VIRGINIA DEPARTMENT OF WASTE MANAGEMENT TO REHRIG INTERNATIONAL





COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

George Allen Governor

Becky Norton Dunlop Secretary of Natural Resources PIEDMONT REGIONAL OFFICE 4949-A Cox Road Glen Allen, Virginia 23060 (804) 527-5020 Fax (804) 527-5106 http://www.deg.state.va.us

August 6, 1996

Thomas L. Hopkins Director

Gerard Seeley, Jr. Piedmont Regional Director

Mr. Richard Coiner Plant Manager Rehrig International 901 Lombardy Street Richmond, Virginia 23220

RCRA Compliance Inspection, Rehrig International, 901 Lombardy Street,

Richmond, Virginia 23220. EPA ID# VAR089028377.

Dear Mr. Coiner:

Thank you very much for your cooperation during the Hazardous Waste Compliance Inspection at your facility on July 11, 1996. After assessing the amount of hazardous waste generation by your facility it was determined that Rehrig International is a Large Quantity Generator of hazardous waste.

During the inspection it appeared that your facility as a Large Quantity Generator was not in compliance with the Virginia Hazardous Waste Management Regulations (VHWMR). Such instances are indicated by " * " marks on the enclosed checklists and are listed below:

A. RECORD KEEPING:

- Hazardous waste manifests had not been received from the TSD facility for hazardous waste which had been shipped over 45 days. This is required under section 6.5.C.1.b. of the VHWMR.
- 2. The facility had not filed an exception report with the Director of the Department of Environmental Quality for the hazardous waste which was shipped over 45 days where there was no manifest received from the TSD for the shipment. This is required under section 6.5.C.1.b. of the VHWMR.

- 3. The facility did not have job titles for each position at the facility related to hazardous waste management. This is required under section 9.1.G.4.a. of the VHWMR.
- 4. The owner/operator has not maintained on file at the facility a record of the results of tank assessments made by a Virginia registered professional engineer. This is required in section 9.9.D.8.c. of the VHWMR.

B. FACILITY SAFETY:

1. The facility did not have adequate aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment during emergencies. This is required under section 9.2.E. of the VHWMR.

C. USE AND MANAGEMENT OF CONTAINERS FOR 90 DAY ACCUMULATION AREAS:

- 1. The generator did not have a record of inspections of the accumulation area at the facility in an inspection log. This is required under section 6.4.E.1.d. and 9.1.F.4. of the VHWMR.
- 2. The generator did not have containers labeled or marked clearly with the words "Hazardous Waste". This is required under section 6.4.E.1.c. of the VHWMR.
- 3. All containers holding hazardous waste were not kept closed during storage. This is required under section 9.8.D.1. of the VHWMR.
- 4. Storage containers holding hazardous wastes which are incompatible with any materials or other hazardous wastes stored nearby were not separated by means of dikes, berms, walls, or other devices. This is required under section 9.8.G.3. of the VHWMR.

D. MANAGEMENT OF TANKS FOR HAZARDOUS WASTES:

- 1. The secondary containment system is not constructed or lined with materials that are compatible with the waste(s) to be placed in the tank system and of sufficient strength and thickness to prevent failure due to pressure gradients, physical contact with the waste, climatic conditions, stress of installation, and the stress of daily operation. This is required under section 9.9.D.3.a. of the VHWMR.
- 2. The secondary containment system is not provided with a leak detection system that is designed or operated so that it will detect the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours or at the earliest practicable time if the existing detection technology or site conditions will not allow detection of a release within 24 hours. This is required under section 9.9.D.3.c. of the VHWMR.

- 3. The external liner system for the tanks was not designed to contain 100% of the capacity of the largest tank within its boundary. This is required under section 9.9.D.5.a.(1). of the VHWMR.
- 4. The external liner system for the facility's tank area was not free of gap as the external liner system is not continuous around the tanks. This is required under section 9.9.D.5.a.(3) of the VHWMR.
- 5. For other than non-enterable underground tanks and for all ancillary equipment, an annual leak test or other internal inspection was not performed by an independent Virginia registered professional engineer that addresses cracks, leaks corrosion and erosion. This was not performed annually on the facility's tank units. As stated by facility representatives that Tank No. 1, (used for caustic hazardous waste) was not examined by a registered Virginia engineer after repairs were completed for a crack. This is required under section 9.9.8.D.b. of the VHWMR.
- 6. Inspections regarding sections 9.9.F.1.(tank inspections to be completed at least once each operating day) were not documented in the facility operating record or log. This is required under section 9.9.F.3. and 9.1.F.4. of the VHWMR.

These issues were discussed with facility representatives during the inspection. Please advise this office within 10 calendar days if this information is incorrect. Please take the appropriate corrective action for items (A through D) to bring your facility into compliance with the VHWMR.

Please provide all appropriate documentation of your corrective measures concerning items A, B, C 1, C. 2, C. 3 within 30 days of receipt of this letter. In regards to item C.4 and D, please provide all documentation of your corrective measures to this office within 90 days of receipt of this letter.

If you have any further questions regarding this matter, please call me at (804) 527-5074.

Sincerely:

Jon D. Chinnery

Environmental Inspector

Enclosures

cc: file

Claire R. Slaughter, DEQ, OTA, (enclosures)

Cathy P. Franco, Enforcement, DEQ, Piedmont Regional Office

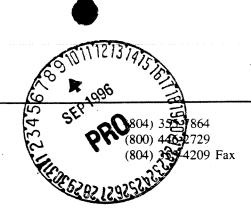
Charley W. Banks, DEQ, Piedmont Regional Office

SEPTEMBER 4, 1996 LETTER FROM REHRIG INTERNATIONAL TO VDEQ

REHRIG INTERNATIONAL

901 North Lombardy Street Richmond, Virginia 23220

September 4, 1996



Jon D. Chinnery
Environmental Inspector
Office of Waste Compliance
Commonwealth of Virginia
Department of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

RE: RCRA Compliance Inspection, Rehrig International, 901 Lombardy Street, Richmond, Virginia 23220. EPA ID# VAR089028377

Dear Jon D. Chinnery:

The following corrective actions have taken place with respect to the Hazardous Waste Compliance Inspection at our facility on July 11, 1996.

A. Record Keeping:

- 1. Hazardous waste manifests were received from the TSD facilities on 7/24/96 for hazardous waste which has been shipped over 45 days (Section 6.5.C.1.b. of the VHWMR).
- 2. The facility does not have to file an exception report with the Director of the Department of Environmental Quality due to the 7/24/96 corrective action (Section 6.5.C.1.b. of the VHWMR).
- 3. The facility completed job titles for each position of the facility related to hazardous waste management on 8/9/96 (Section 9.1.G.4.a. of the VHWMR).
- 4. The owner operator is contacting a Virginia registered professional engineer to record the results of the tank assessments. The liquid waste in these tanks is being transferred frequently to an offsite TSD facility (Section 9.9.D.8.c. of the VHWMR).
- B. Facility Safety:



- 1. The facility is maintaining adequate isle space to allow unobstucted movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment during emergencies (Section 9.2.E. fo the VHWMR).
- C. Use and Management of Containers for 90 Day Accumulation Areas:
- 1. The generator has records of inspections of accumulation area at the facility in an inspection log completed 8/9/96 (Sections 6.4.E.1.d. and 9.1.F.4. of the VHWMR).
- 2. The generator has all containers labeled or marked clearly with the words "Hazardous Waste" on 7/24/96 (Section 6.4.E.1.c. of the VHWMR).
- 3. All containers of hazardous waste are kept closed during storage on 7/12/96 (Section 9.8.D.1. of the VHWMR).
- 4. Storage containers holding hazardous wastes which are incompatable with any materials or other hazardous wastes stored nearby were not separated by means of dikes (Section 9.8.G.3. of the VHWMR). An outside contractor has been contacted 8/26/96 and is developing a quotation to presented to facility by 9/6/96.
- D. Management of Tanks for Hazardous Wastes:
- 1.,2.,3.,4. An outside contractor has been contacted 8/16/96 and is developing a quotation to be presented to facility by 9/6/96 (Sections 9.9.D.3.a., 9.9.D.3.c., 9.9.D.5.a.(1)., 9.9.D.5.a.(3)).
- 5. We are contacting an outside vendor (independent Virginia registered professional engineer) to provide annual leak test or other internal inspection (Section 9.9.8.D.6. of the VHWMR).
- 6. Inspections regarding sections 9.9.F.1. were documented starting on 8/9/96 (Sections 9.9.F.3 and 9.1.F.4 of the VHWMR).

We would like to arrange a followup inspection to verify the completion of the corrective action. I will be in contact with you on Friday, 9/6/96 to arrange a time for the visit.

Very best regards,

Timothy C. Yehl Plating Manager

REHRIG INTERNATIONAL

901 North Lombardy Street Richmond, Virginia 23220 (804) 355-7864 (800) 446-2729 (804) 355-4209 Fax

September 4, 1996

Joh D. Chinnery
Edvironmental Inspector
Office of Waste Compliance
Commonwealth of Virginia
Department of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

RE: RCRA Compliance Inspection, Rehrig International, 901 Lombardy Street, Richmond, Virginia 23220. EPA ID# VAR089028377

Dear Jon D. Chinnery:

The following corrective actions have taken place with respect to the Hazardous Waste Compliance Inspection at our facility on July 11, 1996.

A Record Keeping:

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The facility does not have to file an exception report with the Director of the Department of Environmental Quality due to the 7/24/96 corrective action (Section 6.5.C.1.b. of the VHWMR).

The facility completed job titles for each position of the facility related to hazardous waste in languagement on 8/9/96 (Section 9.1.G.4.a. of the VHWMR).

4. The owner operator is contacting a Virginia registered professional engineer to record the results of the tank assessments. The liquid waste in these tanks is being transferred frequently to an offsite TSD facility (Section 9.9.D.8.c. of the VHWMR).

B Facility Safety:



- The facility is maintaining adequate isle space to allow unobstucted movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment during emergencies (Section 9.2.E. fo the VHWMR).
 - C. Use and Management of Containers for 90 Day Accumulation Areas:
 - The generator has records of inspections of accumulation area at the facility in an inspection log completed 8/9/96 (Sections 6.4.E.1.d. and 9.1.F.4. of the VHWMR).
 - 12. The generator has all containers labeled or marked clearly with the words "Hazardous Waste" on 7/24/96 (Section 6.4.E.1.c. of the VHWMR).
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 - 1.,2.,3.,4. An outside contractor has been contacted 8/16/96 and is developing a quotation to be presented to facility by 9/6/96 (Sections 9.9.D.3.a., 9.9.D.3.c., 9.9.D.5.a.(1)., 9.9.D.5.a.(3)).
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 - 6. Inspections regarding sections 9.9.F.1. were documented starting on 8/9/96 (Sections 9.9.F.3 and 9.1.F.4 of the VHWMR).

We would like to arrange a followup inspection to verify the completion of the corrective action. I will be in contact with you on Friday, 9/6/96 to arrange a time for the visit.

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Very best regards,

Plating Manager

R. C. Hegamyer

P.O. BOX 1086 MECHANICSVILLE, VA 23111

1 Sept 1996

Rehrig International 109 N. Lombardy st. Richmond, Virginia

Pre-bid submittal of plans to provide secondary tarriers for 5 acid/alkaline FRF holdings in plating tank farm.

- 1) Fabricate FRP open top vessels 3' in Ø larger than existing vessels.
- 2) Height of each barrier vessel be such that capacity of barrier will be equal to inner vessel plus 5%.
- 3) Each barrier vessel will have one manhole sufficient in size to allow removal of inner manhole.
- 4) Each barrier vessel will be of vinyl ester resin with glass filiment re-enforcing.
- 5) Each barrier vessel will be field constructed of a base circle bottom with two side sections.
- 6) inner vessele will rest on $\frac{1}{2}$ " foam.

Construction procedures, pricing, and scheduling will be covered in the actual bid package. please look over this submittal and offer any comments that you may have.

Sincerely, A.C. Asagus R.C. Hegamyer

For 90 Da, Accumulation Area for Hazaravus Waste

Week Ending Date	# of Containers	Condition of Containers	Date/Nature of Repair/Action Inspected By
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Permanent Weekly Inspection Legisland From For 90 Da Accumulation Area for Hazarous Waste

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Date	Containers	Containers	
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COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

George Allen Governor

Becky Norton Dunlop Secretary of Natural Resources PIEDMONT REGIONAL OFFICE 4949-A Cox Road Glen Allen, Virginia 23060 (804) 527-5020 Fax (804) 527-5106 http://www.deq.state.va.us

August 6, 1996

Thomas L. Hopkins Director

Gerard Seeley, Jr. Piedmont Regional Director

1000

1014

pood

protection

Mr. Richard Coiner Plant Manager Rehrig International 901 Lombardy Street Richmond, Virginia 23220

RE: RCRA Compliance Inspection, Rehrig International, 901 Lombardy Street, Richmond, Virginia 23220. EPA ID# VAR089028377.

Dear Mr. Coiner:

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using multiday matrix books 6,400

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3. The facility did not have job titles for each position at the facility related to hazardous waste management. This is required under section 9.1.G.4.a. of the VHWMR.

4. The owner/operator has not maintained on file at the facility a record of the results of tank assessments made by a Virginia registered professional engineer. This is required in section 9.9.D.8.c. of the VHWMR.

B. FACILITY SAFETY:

1. The facility did not have adequate aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment during emergencies. This is required under section 9.2.E. of the VHWMR.

C. USE AND MANAGEMENT OF CONTAINERS FOR 90 DAY ACCUMULATION **AREAS:**

1. The generator did not have a record of inspections of the accumulation area at the facility in an inspection log. This is required under section 6.4.E.1.d. and 9.1.F.4. of the VHWMR.

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D. MANAGEMENT OF TANKS FOR HAZARDOUS WASTES:

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2. The secondary containment system is not provided with a leak detection system that is designed or operated so that it will detect the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours or at the earliest practicable time if the existing detection technology or site conditions will not allow detection of a release within 24 hours. This is required under section 9.9.D.3.c. of the VHWMR.

3. The external liner system for the tanks was not designed to contain 100% of the capacity of the largest tank within its boundary. This is required under section 9.9.D.5.a.(1). of the VHWMR.

4. The external liner system for the facility's tank area was not free of gap as the external liner system is not continuous around the tanks. This is required under section 9.9.D.5.a.(3) of the VHWMR.

5. For other than non-enterable underground tanks and for all ancillary equipment, an annual leak test or other internal inspection was not performed by an independent Virginia registered professional engineer that addresses cracks, leaks corrosion and erosion. This was not performed annually on the facility's tank units. As stated by facility representatives that Tank No. 1, (used for caustic hazardous waste) was not examined by a registered Virginia engineer after repairs were completed for a crack. This is required under section 9.9(8)Db. of the VHWMR.

6. Inspections regarding sections 9.9.F.1.(tank inspections to be completed at least once each operating day) were not documented in the facility operating record or log. This is required under section 9.9.F.3. and 9.1.F.4. of the VHWMR.

These issues were discussed with facility representatives during the inspection. Please advise this office within 10 calendar days if this information is incorrect. Please take the appropriate corrective action for items (A through D) to bring your facility into compliance with the VHWMR.

Please provide all appropriate documentation of your corrective measures concerning items A, B, C 1, C. 2, C. 3 within 30 days of receipt of this letter. In regards to item C.4 and D, please provide all documentation of your corrective measures to this office within 90 days of receipt of this letter.

If you have any further questions regarding this matter, please call me at (804) 527-5074.

Sincerely:

Jon D. Chinnery

Environmental Inspector

Enclosures

cc: file

Claire R. Slaughter, DEQ, OTA, (enclosures)

Cathy P. Franco, Enforcement, DEQ, Piedmont Regional Office

Charley W. Banks, DEQ, Piedmont Regional Office

SEPTEMBER 23, 1996 LETTER FROM CTI CONSULTANTS, INC. TO REHRIG INTERNATIONAL

Exh. bit B.



905-B SOUTHLAKE BOULEVARD RICHMOND, VA 23236 (804) 897-1087

CONFIDENTIAL

September 23, 1996

Mr. Kenny Cullingsworth
REHRIG INTERNATIONAL
901 N. Lombardy Street
Richmond, Virginia 23230
(804) 355-7864 x143
(fax) 354-0618

RE:

Proposal/Work Scope for Visual Inspection of Fiberglass Tanks Located in Richmond, Virginia

Dear Mr. Cullingsworth:

Please accept our reply to your request of September 17, 1996, for non-destructive interior inspection of several fiberglass tanks located at your Richmond, Virginia plant. In accordance with your instructions, we propose to conduct a visual inspection of the interiors and exteriors, augmented by a photographic record. A summary of the proposed testing follows and an Estimate of Costs is attached.

We propose to supply the equipment, personnel and expertise required to properly evaluate the applicable areas of the tanks. The project would be performed in a timely manner under the direction of our **entry supervisor**. It is our understanding that the tanks are located in the same building and we would have adequate access to all of them. In addition, the tanks should be drained of contents, cleaned of debris and dried by others prior to our arrival. It is not expected that any grinding or wire-brushing sediment, corrosion products, sludge or scale from the tanks' interior would be required. If necessary, these services would be provided at an additional cost. Electrical service must be available within a practical range and our personnel would provide the necessary safety equipment required for tank entry. These would include, but are not limited to, an oxygen/flammability/toxic gas indicator, mechanical ventilation, ground-fault circuit interrupter and an auxiliary self-contained air supply. Please note that confined space entry is recognized by our industry as potentially hazardous. Should an accident occur that requires medical attention, we would rely on your in-house medical facilities or the local fire department for assistance.



We feel that the inspection of the tanks could begin on 2 weeks notice and once the data was collected and analyzed, a report would be available in about 10 days. However, we will work with you in every way possible to provide you with the required information within your deadline. Although charges may vary either up or down depending on the actual circumstances encountered, we have attached an estimate of the charges relative to our involvement with this project.

If the terms of this proposal are acceptable to you and they satisfactorily set forth your understanding of the arrangement between us, we would appreciate your signing the enclosed copy of this letter in the space provided and returning it to us. We look forward to hearing from you.

Sincerely,

CTI Consultants, Inc.

Christopher A. Workman, P.E. Richmond Branch Manager

CAW/cw
Enclosures

Accepted this _____ day of ______, 1996

By: _____

Enclosures



ATTACHMENT I

September 23, 1996

COST ESTIMATE FOR INTERIOR EXAMINATION OF 2 FIBERGLASS TANKS

Interior Tank Inspection (Entry Supervisor and Technician): 8 Hours at \$ 95 per hour
35mm Photographic Services
Travel Time
Mileage
Reporting of Results: 4 Hours at \$ 65 per hour \$ 260.00
Rental of Applicable Safety Equipment per day
Total Estimated Charges Involved in This Project
Cost per tank

It is our understanding that our involvement in this project may be expanded or reduced, depending on the actual circumstances encountered at the plant and input from you. Services required in excess of the above would be charged at a unit overtime rate of 1.3. Any known changes affecting this estimate should be discussed prior to our arrival at the site. Our estimate of charges would reflect these changes.

* - It is believed that we can inspect 2 tanks per day (portal-to-portal). If more tanks are included in the project, a substantial savings per tank can be obtained.

Proposed Personnel Assigned To This Project:

Chris Workman, Entry Supervisor Al Lambeth, Entrant, NDT Assistant

OCTOBER 3, 1996

LETTER FROM COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY TO REHRIG INTERNATIONAL



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

George Allen Governor

Becky Norton Dunlop Secretary of Natural Resources PIEDMONT REGIONAL OFFICE 4949-A Cox Road Glen Allen, Virginia 23060 (804) 527-5020 Fax (804) 527-5106 http://www.deq.state.va.us

October 3, 1996

Thomas L. Hopkins Director

Gerard Seeley, Jr. Piedmont Regional Director

Mr. Richard Coiner
Plant Manager
Rehrig International
901 Lombardy Street
Richmond, Virginia 23220

RE: RCRA Compliance Inspection, Rehrig International, 901 Lombardy Street, Richmond, Virginia 23220. EPA ID# VAR089028377.

Dear Mr. Coiner:

I am in receipt of a letter from Timothy Yehl (Plating Manager) dated September 4, 1996. I have noted the areas of concern from our follow up inspection of your facility on September 16, 1996.

A. RECORD KEEPING:

- 1.) Hazardous waste manifests have not been received from the TSD facility for hazardous waste which had been shipped over 45 days.
- aa.) The facility was able to provide copies of all hazardous waste manifests for the years 1994, 1995 & 1996. These manifests were reviewed and contained the TSD facility representative signature for receiving the hazardous waste. This complies with Section 6.5.C.1.b. of the VHWMR.
- 2.) The facility had not filed an exception report with the Director of the Department of Environmental Quality for the hazardous waste which was shipped over 45 days where there was no manifest received from the TSD for the shipment.
- aa.) The facility was able to provide the manifests with signatures from the TSD facility representative within the 45 day period. This complies with Section 6.5.C.1.b. of the VHWMR.

aa.) The facility did not have job titles for each position at the facility related to hazardous waste management.

aa.) The facility was able to provide a list of job titles of positions currently filled by facility personnel who provide hazardous waste management for the facility. This complies with Section 9.1.G.4.a. of the VHWMR.

B. FACILITY SAFETY:

1.) The facility did not have adequate aisle space to allow the unobstructed movement of personnel, fire protection equipment, and decontamination equipment during emergencies.

aa.) During the (physical observation) follow-up inspection on September 16, 1996 it was noted by inspectors that all aisle ways at or near the points of hazardous waste generation and the accumulation areas were clear and unobstructed. This complies with Section 9.9.D.8.c. of the VHWMR.

C. USE AND MANAGEMENT OF CONTAINERS FOR 90 DAY ACCUMULATION AREAS:

1.) The generator did not have a log of inspections of the accumulation area at the facility in an

- The generator did not have a log of inspections of the accumulation area at the facility in an inspection log.
- aa.) It was discussed during the follow-up inspection with facility representatives, that certain changes would have to be made in the language regarding the inspection log currently being used at the facility. A copy of the amended log was received on September 16, 1996 from Timothy Yehl (Plating Manager). This log contained the amended language and is attached to the inspection report. This complies with Section 6.4.E.1.d. and 9.1.F.4. of the VHWMR.
- 2.) The generator did not have containers labelled or marked clearly with the words "Hazardous Waste".
- aa.) Upon inspection of the facility on September 16, 1996 inspectors noted that all containers containing hazardous waste were properly labelled with the words "Hazardous Waste". This complies with Section 6.4.E.1.c. of the VHWMR.
 - 3.) All containers holding hazardous waste were not kept closed during storage.
- aa.) During the follow-up inspection of September 16, 1996, it was noted by inspectors that all containers containing hazardous waste were closed. In the case of satellite containers proper bungs on the drums were in place. This complies with Section 9.8.D.1. of the VHWMR.
- 4.) Storage containers holding hazardous wastes which are incompatible with any materials or other hazardous wastes stored nearby were not separated by means of dikes, berms, walls, or other devices.
- aa.) During the follow-up inspection of September 16, 1996 it was noted by inspectors that containers holding hazardous waste incompatible with other materials were separated by means of a completed berm around the holding area. This complies with Section 9.8.G.3. of the VHWMR.

page 3 of 4.

D. MANAGEMENT OF TANKS FOR HAZARDOUS WASTE:

- 6.) Inspections regarding sections 9.9.F.1. (tank inspections to be completed at least once each operating day) were not documented in the facility operating record or log.
- aa.) The generator was able to produce a log which listed tank inspection maintained on a log starting on August 9, 1996. This complies with Section 9.9.F.3. and 9.1.F.4. of the VHWMR.

The follow-up inspection of September 16, 1996 noted that many areas of the facility have been brought back into compliance. A number of areas remain out of compliance. Cathie Franco of our enforcement section will work with you to develop a formal schedule for corrective action. Items outstanding are listed below.

A. RECORD KEEPING:

4.) The owner/operator has not maintained on file at the facility a record of the results of tank assessments made by a Virginia registered professional engineer. This is required under Section 9.9.D.8.c. of the VHWMR.

D. MANAGEMENT OF TANKS FOR HAZARDOUS WASTES:

- 1.) The secondary containment system is not constructed or lined with materials that are compatible with the waste(s) to be placed in the tank system and of sufficient strength and thickness to prevent failure due to pressure gradients, physical contact with the waste, climatic conditions, stress of installation, and the stress of daily operation. This is required under Section 9.9.D.3.a. of the VHWMR.
- 2.) The secondary containment system is not provided with a leak detection system that is designed or operated so that it will detect the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours or at the earliest practicable time if the existing detection technology or site conditions will not allow detection of a release within 24-hours. This is required under Section 9.9.D.3.c. of the VHWMR.
- 3.) The external liner system for the tanks was not designed to contain 110% of the capacity of the largest tank within its boundary. This is required under Section 9.9.D.5.a.(1) of the VHWMR.
- 4.) The external liner system for the facility's tank area was not free of gap as the external liner system is not continuous around the tanks. This is required under Section 9.9.D.5.a.(3) of the VHWMR.
- 5.) For other than non-enterable underground tanks and for all ancillary equipment, an annual leak test or other internal inspection was not performed by an independent Virginia registered professional engineer that addresses cracks, leaks, corrosion and erosion. This was not performed annually on the facility's tank units. Facility representatives stated that Tank No. 1, (used for caustic hazardous waste) was not examined by a registered Virginia engineer after repairs were completed for a crack. This is required under Section 9.9.8.D.b. of the VHWMR.

page 4 of 4.

These issues were discussed with facility representatives during the inspection of July 11, 1996 and the follow-up inspection of September 16, 1996. Cathie Franco will contact you regarding these outstanding issues.

If you have any further questions regarding this matter, please call me at (804) 527-5074 or Cathie Franco at (804) 527-5081.

Sincerely:

Jon D. Chinnery

Environmental Inspector

Enclosures

cc: file

Cathy P. Franco, Enforcement, DEQ, Piedmont Regional Office Charley W. Banks, DEQ, Piedmont Regional Office

DECEMBER 17, 1996 VIRGINIA WASTE MANAGEMENT BOARD CONSENT ORDER



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

George Allen Governor

Becky Norton Dunlop Secretary of Natural Resources PIEDMONT REGIONAL OFFICE 4949-A Cox Road Glen Allen, Virginia 23060 (804) 527-5020 Fax (804) 527-5106 http://www.deq.state.va.us

Thomas L. Hopkins
Director

Gerard Seeley, Jr.
Piedmont Regional Director

VIRGINIA WASTE MANAGEMENT BOARD CONSENT ORDER

Re: Rehrig International EPA ID NO. VAD089028377

SECTION A: PREAMBLE AND AUTHORITY

This is an Enforcement Order ("Order") issued by the Virginia Waste Management Board ("Board") to Rehrig International ("Rehrig"). This Order is issued by the Board, through the Director ("Director") of the Department of Environmental Quality ("DEQ"), pursuant to the authority granted to the Board and the Director under §§ 10.1-1182 to -1192, -1402, -1405, and -1455 of the Code of Virginia (1950), as amended ("Virginia Code").

Pursuant to 42 U.S.C. § 6926, the United States
Environmental Protection Agency ("EPA") has granted the
Commonwealth of Virginia interim and final authorization to
administer and enforce its hazardous waste program (Phase I and
Phase II Components A and B) in lieu of the federal hazardous
waste program, as published in the Federal Register on
November 3, 1981, August 17, 1983, and December 4, 1984.

SECTION B: FINDINGS

- 1. Rehrig is a manufacturer of grocery shopping carts and shopping baskets located at 901 Lombardy Street, Richmond, VA.
- 2. Rehrig filed a "Notification of Hazardous Waste Activity" with EPA on November 4, 1980, declaring Rehrig to be a generator of hazardous waste listed or identified under Title 40, Code of Federal Regulations, Part 261. The operations generate the following waste streams: F006 and D007. The waste produced is stabilized waste sludge from the nickel trichrome plating process.

- 3. On July 11, 1996, DEQ staff conducted a Compliance Evaluation Inspection ("CEI") at Rehrig. Following the CEI, DEQ sent Rehrig a Notice of Violation letter alleging the following violations:
 - a. Hazardous waste manifests had not been received from the TSD facility for hazardous waste which had been shipped over 45 days and no exception report had been filed with the Director 9 VAC 20-60-380.C.1.b. (formerly § 6.5.C.1.b. of the VHWMR);
 - b. Failure to have job titles for each position at the facility related to hazardous waste management 9 VAC 20-60-530.G.4.a (§ 9.1.G.4.a.);
 - c. Failure to maintain on file at the facility a record of the results of tank assessments made by a Virginia registered professional engineer 9 VAC 20-60-610.D.8.c. (§ 9.9.D.8.c.);
 - d. Failure to maintain adequate aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment during emergencies 9 VAC 20-60-540.E. (§ 9.2.E.);
 - e. Failure to have a record of inspections of the accumulation area at the facility in an inspection log 9 VAC 20-60-370.E.1.d., 9 VAC 20-60-530.F. (§§ 6.4.E.1.d., 9.1.F.4);
 - f. Failure to have containers labeled or marked clearly with the words "Hazardous Waste" 9 VAC 20-60-370.E.1.c. (§ 6.4.E.1.c.);
 - g. Failure to keep all containers holding hazardous waste closed during storage 9 VAC 20-60-600.D.1. (\$ 9.8.D.1.);
 - h. Failure to store containers holding hazardous wastes which are incompatible with any materials, or other hazardous wastes stored nearby, separated by means of dikes, berms, wall, or other devices 9 VAC 20-60-600.G.3. (§ 9.8.G.3.);
 - i. The secondary containment system is not constructed or lined with materials that are compatible with the waste(s) to be placed in the tank system and of sufficient strength and thickness to prevent failure

due to pressure gradients, physical contact with the waste, climatic conditions, stress of installation, and the stress of daily operation 9 VAC 20-60-610.D.3.a. (§ 9.9.D.3.a.)

- j. The secondary containment system is not provided with a leak detection system that is designed or operated so that it will detect the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours or at the earliest practicable time 9 VAC 20-60-610.D.3.c.(§ 9.9.D.3.c.);
- k. The external liner system for the tanks was not designed to contain 100% of the capacity of the largest tank within its boundary 9 VAC 20-60-610.D.5.a.(1) (§ 9.9.D.5.a.(1));
- 1. The external liner system for the facility's tank area was not free of gap as the external liner system is not continuous around the tanks 9 VAC 20-60-610.D.5.a.(3)(§ 9.9.D.5.a.(3);
- m. For other than non-enterable underground tanks and for all ancillary equipment, an annual leak test or other internal inspection was not performed by an independent Virginia registered professional engineer that addresses cracks, leaks, corrosion, and erosion 9 VAC 20-60-610.D.8.b (§ 9.9.D.8.b); and
- n. Failure to document daily tank inspections in the facility operating record or log 9 VAC 20-60-610.F.3., 9 VAC 20-60-530.F.4 (§§ 9.9.F.3, 9.1.F.4.)

SECTION C: ORDER

As a result of an informal conference on November 26, 1996, between representatives of Rehrig and DEQ, and subsequent discussions and correspondence between the parties, Rehrig and DEQ, after due consideration, enter into this Order in voluntary

^{4.} As a result of Rehrig's correspondence dated September 4, 1996, and a follow up inspection of the facility conducted on September 16, 1996, the following areas noted in paragraph 3 above have been returned to compliance: Paragraph 3.a.; 3.b.; 3.d; 3.e.; 3.f.; 3.g.; 3.h; and 3.n. Certain items noted in paragraph 3 above remain out of compliance; however, Rehrig is actively working to bring these items back into compliance: 3.c.; 3.i.; 3.j.; 3.k.; 3.l.; and 3.m.

resolution of the violations noted in Section B.

Therefore, in order to ensure that Rehrig takes appropriate and timely action to meet its obligations, the Board, through the Director, hereby ORDERS, and Rehrig agrees to comply with, the Schedule of Compliance in Appendix A, which is incorporated herein by reference.

SECTION D: ADMINISTRATIVE PROVISIONS

- 1. For the purpose of this proceeding, Rehrig does not contest the jurisdictional and factual allegations contained herein.
- 2. For the purpose of this proceeding, Rehrig waives the right to request further hearing on any issue of fact or law herein and consents to the terms and issuance of this Order.
- 3. For the purposes of this proceeding, and for any future proceeding to enforce the terms of this Order, Rehrig admits that fair and due process under the Administrative Process Act, Virginia Code §§ 9-6.14:1 to :25, has been received in the issuance of this Order.
- 4. This Order shall remain in effect as follows:
 - a. The requirements imposed in Appendix A will terminate upon completion of the action required.
 - b. This Order shall remain in effect until terminated in writing by the Director. Rehrig may petition the Director to terminate this Order one (1) year after Rehrig has completed the requirements contained herein.
 - c. The Director may terminate this Order upon a finding that Rehrig has violated one or more of the provisions contained in this Order, has violated the VHWMR, or has violated the Virginia Waste Management Act. Rehrig acknowledges that failure to comply with the terms of this Order may subject it to additional enforcement action by the Board or the Department. Such action may include issuance of a special order as authorized by \$\$ 10.1-1182 and 10.1-1186 of the Code, including imposition of up to \$10,000 in penalties.
- 5. Termination of this Order, or of any obligation imposed in this Order, shall not operate to relieve Rehrig from its obligation to comply with any statute, regulation, permit condition, other order, certification, standard, or requirement otherwise applicable.

- 6. Rehrig shall be responsible for compliance with all of the terms and conditions of this Order unless Rehrig can show that compliance is made impossible by a circumstance set forth in § 10.1-1406 of the Code, an act of God, an act of war, an act or omission of a third party so long as Rehrig took precautions against foreseeable acts or omissions, or any combination of the preceding. Rehrig must demonstrate that compliance could not have been achieved through careful management of the waste and that Rehrig has made a good faith effort to comply with this Order.
- 7. Rehrig shall notify the Director, in writing, when circumstances are anticipated to occur, are occurring, or have occurred, that may delay compliance with, or cause noncompliance with, any requirement of this Order. Such notice shall state:
 - a. the reasons for the delay or noncompliance;
 - b. the projected duration of such delay or noncompliance;
 - c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and
 - d. the time table by which such measures will be implemented and the date full compliance will be achieved.

Failure to so notify the Director shall constitute a waiver of any claim of inability to comply with a requirement of this Order.

- 8. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
- 9. This Order is binding on the parties hereto, their successors in interest, designees, and assigns, jointly and severally.
- 10. This Order addresses and resolves only the violations cited herein relating to the management and storage of hazardous waste. Issuance of this Order shall not preclude the Board or the Director from seeking subsequent necessary remediation, as otherwise authorized by law. Any subsequent remediation will be subject to the provisions of the Administrative Process Act, including §§ 9-6.14:11 and :12 of the Code.
- 11. This Order is issued by the Virginia Waste Management Board, and does not affect the authority of the State Air Pollution Control Board or the State Water Control Board.

12. This Order shall become effective upon execution by both the Director (or his designee) and an authorized agent of Rehrig.

This is an Order of the Virginia Waste Management Board and the Director of the Department of Environmental Quality in accordance with §§ 10.1-1182 to -1192, and -1455 of the Code of Virginia (1950), as amended.

Thomas I. Hopkins Director
Department of Environmental Quality

Commonwealth of Virginia
City/County of Lenuch

The foregoing instrument was acknowledged before me by Enand Sceley, n., this 2389 day of January, 1997

My Commission Expires: May 31, 2000
Notary Public

My Commission Expires: May 31, 2000

Seen and Agreed to: Rehrig International	/7 /96 Date
Commonwealth of Virginia County/City of Vichmond The foregoing instrument was Alan 2. Lan, on beh this 17 day of December,	alf of Rehrig, International,
My Commission Expires: 6/30/99 Date	Latherine a. Meada-J. Mon

APPENDIX A

SCHEDULE OF COMPLIANCE

Re: Rehrig International EPA ID NO. VAD089028377

- 1. Within ninety (90) days of the effective date of this Order, Rehrig shall maintain on file at the facility a record of the results of tank assessments made by a Virginia registered professional engineer in accordance with 9 VAC 20-60-610.D.8.c.(§ 9.9.D.8.c.)
- 2. Within ninety (90) days of the effective date of this Order, the secondary containment system shall be constructed or lined with materials that are compatible with the waste(s) to be placed in the tank system and of sufficient strength and thickness to prevent failure due to pressure gradients, physical contact with the waste, climatic conditions, stress of installation, and the stress of daily operation in accordance with 9 VAC 20-60-610.D.3.a. (§ 9.9.D.3.a.)
- 3. Within ninety (90) days of the effective date of this Order, the secondary containment system shall be provided with a leak detection system that is designed or operated so that it will detect the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours or at the earliest practicable time in accordance with 9 VAC 20-60-610.D.3.c. (§ 9.9.D.3.c.)
- 4. Within ninety (90) days of the effective date of this Order, the external liner system for the tanks shall be designed to contain 100% of the capacity of the largest tank within its boundary in accordance with 9 VAC 20-60-610.D.5.a.(1) (§9.9.D.5.a.(1))
- 5. Within ninety (90) days of the effective date of this Order, the external liner system for the facility's tank area shall be free of gap and the external liner system shall be continuous around the tanks in accordance with 9 VAC 20-60-610.D.5.a.(3)(§ 9.9.D.5.a.(3))
- 6. Within ninety (90) days of the effective date of this Order, for other than non-enterable underground tanks and for all ancillary equipment, an annual leak test or other internal inspection shall be performed by an independent Virginia registered professional engineer that addresses cracks, leaks, corrosion, and erosion, and such test shall be performed annually hereafter in accordance with 9 VAC 20-60-610.D.8.b. (§ 9.9.D.8.b.)

Schedule of Compliance Rehrig International Page 2

7. Within thirty (30) days of the effective date of this Order, Rehrig shall deliver to DEQ a check in the amount of \$4,690.00 made payable to the Virginia Department of Environmental Quality. On the check, please note that the check is for payment of a civil charge pursuant to the Order. This amount shall be in voluntary resolution of the violations of the VHWMR noted herein, in accordance with 9 VAC 20-60-80.D.5. (§ 2.7.D.5. of the VHWMR.) Rehrig shall mail the check to the following address:

Virginia Department of Environmental Quality P.O. Box 10150 Richmond, Virginia 23240 Attn.: Fiscal Office

MARCH 17, 1997

LETTER FROM VIRGINIA DEPARTMENT OF WASTE MANAGEMENT TO REHRIG INTERNATIONAL



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

George Allen Governor

Becky Norton Dunlop Secretary of Natural Resources PIEDMONT REGIONAL OFFICE 4949-A Cox Road Glen Allen, Virginia 23060 (804) 527-5020 Fax (804) 527-5106

http://www.deq.state.va.us

Thomas L. Hopkins Director

Gerard Seeley, Jr. Piedmont Regional Director

March 17, 1997

Mr. Richard Coiner
Plant Manager
Rehrig International
901 N. Lombardy Street
Richmond, Virginia 23220

RE: RCRA Compliance Inspection, Rehrig International, 901 N. Lombardy Street, Richmond,

Virginia 23220. EPA ID# VAD 089028377.

Dear Mr. Coiner:

Thank you very much for your cooperation during the follow-up inspection of your facility which was conducted on March 6, 1997. This inspection included all areas of the facility which are involved in hazardous waste management. This follow-up inspection focused on the area of Management of Tanks for Hazardous Waste.

Since the initial inspection on July 11, 1996, there has been much correspondence back and forth between myself and members of your staff. This also included follow-up inspections on September 16, 1996 and November 26, 1996. I have reviewed all the materials which I received from you and your staff in regards to the inspection of your facility on July 11, 1996. After review of the information you and your staff have provided, I am satisfied that you have corrected all the items in Sections A, B, C, & D which were noted in my letter dated August 6, 1996 and October 3, 1996. Based on this information, I am confident that your facility is now in compliance with the Virginia Hazardous Waste Management Regulations (VHWMR).

I have addressed each violation below, noting how and when compliance was achieved for each of the violations:

A. RECORD KEEPING:

1. Hazardous waste manifests had not been received from the TSD facility for hazardous waste which had been shipped over 45 days, and the facility had not filed an exception report with the Director of the Department of Environmental Quality for the hazardous waste which was shipped over 45 days where there was no manifest received from the TSD facility for the shipment. This is required under Section 6.5.C.1.b. of the VHWMR.

Action Taken: The facility was able to provide copies of all hazardous waste manifests for the years 1994, 1995 & 1996. These manifests were reviewed during the follow-up inspection on September 14, 1996, and contained the TSD facility representative signature for receiving the generated hazardous waste. This complies with Section 6.5.C.1.b. of the VHWMR.

2. The facility did not have job titles for each position at the facility related to hazardous waste management. This is required under Section 9.1.G.4.a. of the VHWMR.

Action Taken: The facility was able to provide a list of job titles of positions currently filled by facility personnel who are involved with hazardous waste management for the facility. This was reviewed during the follow-up inspection at the facility on September 14, 1996. This complies with Section 9.1.G.4.a. of the VHWMR.

3. The owner/operator has not maintained on file at the facility a record of the results of tank assessments made by a Virginia registered professional engineer. This is required under Section 9.9.D.8.c. of the VHWMR.

Action Taken: The facility had all tanks related to hazardous waste storage assessed by a Virginia registered professional engineer on January 28, 1997 (letter of certification on file with DEQ-PRO). This complies with Section 9.9.D.8.c. of the VHWMR.

B. FACILITY SAFETY:

The facility did not have adequate aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment during emergencies. This is required under Section 9.2.E. of the VHWMR.

Action Taken: During the follow-up inspections of September 16, 1996, November 26, 1996 and March 6, 1997 it was noted by inspectors that all aisle ways at or near points of hazardous waste generation and the accumulation areas were clear and unobstructed. This complies with Section 9.2.E. of the VHWMR.

C. USE AND MANAGEMENT OF CONTAINERS FOR 90 DAY ACCUMULATION AREAS:

1. The generator facility did not have a record of inspection of the accumulation area at the facility in an inspection log. This is required under Sections 6.4.E.1.d. and 9.1.F.4. of the VHWMR.

Action Taken: It was discussed during the follow-up inspection on September 16, 1996 with facility representatives, that certain changes would have to be made in the language regarding the inspection log currently being used at the facility. A copy of the amended log was received on September 16, 1996 from Mr.Timothy Yehl (Plating Manager). This log contained the amended language and is attached to the inspection report. This complies with Section 6.4.E.1.d. and 9.1.F.4. of the VHWMR.

2. The generator did not have containers labeled or marked clearly with the words "Hazardous Waste". This is required under Section 6.4.E.1.c. of the VHWMR.

Action Taken: Upon inspection of the facility on September 16, 1996 inspectors noted that all containers containing hazardous waste were properly labelled with the words "Hazardous Waste". This complies with Section 6.4.E.1.c. of the VHWMR.

3. All containers holding hazardous waste were not kept closed during storage. This is required under Section 9.8.D.1. of the VHWMR.

Action Taken: During the follow-up inspection on September 16, 1996 it was noted by inspectors that all containers containing hazardous waste were closed. In the case of satellite containers, proper bungs on the drums were in place. This complies with Section 9.8.D.1. of the VHWMR.

4. Storage containers holding hazardous wastes which are incompatible with any materials or other hazardous wastes stored nearby were not separated by means of dikes, berms, walls or other devices. This is required under Section 9.8.G.3. of the VHWMR.

Action Taken: During the follow-up inspection of September 16, 1996, it was noted by inspectors that containers holding hazardous waste incompatible with other materials were separated by means of a completed berm around the holding area. This complies with Section 9.8.G.3, of the VHWMR.

D. MANAGEMENT OF TANKS FOR HAZARDOUS WASTES:

1. The secondary containment system is not constructed or lined with materials that are compatible with the waste(s) to be placed in the tank system and of sufficient strength and thickness to prevent failure due to pressure gradients, physical contact with the waste, climatic conditions, stress of installation, and the stress of daily operation. This is required under Section 9.9.D.3.a. of the VHWMR.

Action Taken: The facility had completed installation of an epoxy liner in the secondary containment system which is of sufficient strength to prevent failure due to pressure gradients, physical contact with the waste, climatic conditions, stress of installation, and the stress of daily operation. This was inspected and approved (with supporting documentation of the epoxy material) during the follow-up inspection on March 6, 1997. This complies with Section 9.9.D.3.a. of the VHWMR.

2. The secondary containment system is not provided with a leak detection system that is designed or operated so that it will detect the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours or at the earliest practicable time if existing detection technology or site conditions will not allow detection of a release within 24 hours. This is required under Section 9.9.D.3.c. of the VHWMR.

Action Taken: The facility has installed a leak detection system within the berm wall of the tanks used for storage of hazardous wastes. The leak detection system is activated when a probe is exposed to liquid rising within the berm to approximately 1 inch. The alarm is monitored 24 hours per day, seven days per week by Security Systems, Inc., located at 3314 Parham Road, Richmond, Va., and the contact person is Mr. Micky Smithers. This detection system complies with Section 9.9.D.3.c. of the VHWMR.

3. The external liner system for the tanks was not designed to contain 110% of the capacity of the largest tank within its boundary. This is required under Section 9.9.D.5.a.(1) of the VHWMR.

Action Taken: The facility's largest tank for hazardous waste storage has a capacity of 5,100 gallons. The berm constructed by the facility has the capacity to exceed 150 to 200 cubic feet of the largest tank (5,100 gallons) within the bermed area which is used for hazardous waste storage. This complies with Section 9.9.D.5.a.(1) of the VHWMR.

4. The external liner system for the facility's tank area was not free of gaps, as the external liner system was not continuous around the tanks. This is required under Section 9.9.D.5.a.(3) of the VHWMR.

Action Taken: It was noted in observation from the March 6, 1997 follow-up inspection that the berm wall encloses all the tanks used for hazardous waste storage. All existing gaps had been completely enclosed by the construction of a new berm wall around the hazardous waste tanks. This berm wall is constructed of cement block reinforced with rim rod and protected on the north and east sides with a reinforced metal wall. This complies with Section 9.9.D.5.a.(3) of the VHWMR.

5. For other than non-enterable underground storage tanks and for all ancillary equipment, an annual leak test or other internal inspection was not performed by an independent Virginia registered professional engineer that addresses cracks, leaks, corrosion and erosion. This was not performed annually on the facility's tank units. Facility representatives stated that Tank No. 1 (used for caustic hazardous waste) was not examined by a registered Virginia engineer after repairs were completed for a crack. This is required under Section 9.9.8.D.b. of the VHWMR.

Action Taken: The facility had all the tanks used for hazardous waste storage examined by an independent Virginia registered professional engineer. This is documented by letter to the facility with the Engineer's seal affixed to the letter. He certifies that all the tanks are free of defects and can be put into immediate use. This complies with Section 9.9.8.D.b. of the VHWMR.

6. Inspections regarding sections 9.9.F.1. (tank inspections to be completed at least once each operating day) were not documented in the facility operating record or log. This is required under Section 9.9.F.3. and 9.1.F.4. of the VHWMR.

Action Taken: The generator was able to produce a log which listed tank inspection maintained on a log starting August 9, 1996. This was examined during the follow-up inspection conducted on September 16, 1996. This complies with Section 9.9.F.3. and 9.1.F.4. of the VHWMR.

page 5 of 5.

This completes all areas of non-compliance from the inspection of July 11, 1996. I want to commend you and your staff for the diligent work they have put forth in this immense project.

Your efforts to not only come into compliance with the VHWMR but to go above and beyond what was required is commendable. Thank you for doing your share to help protect the quality of the environment for the Commonwealth of Virginia.

If you have any further questions regarding this matter, please do not hesitate to contact me at (804) 527-5074.

Sincerely,

Jon D. Chinnery Environmental Inspector, Senior

Enclosures

cc:

tile

Claire R. Ballard, OTA, DEQ (enclosures)

Cathy P. Franco, Enforcement, PRO (w/o enclosures) Charley W. Banks, Inspector, PRO (w/o enclosures)

D. 11 Manuary Debate International Vice President (Money

David Klossner, Rehrig International, Vice President (Manufacturing) (w/o enclosures)

MAY 15, 1998

LETTER FROM VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY TO REHRIG INTERNATIONAL



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

James S. Gilmore, III Governor

PIEDMONT REGIONAL OFFICE 4949-A Cox Road Glen Allen, Virginia 23060 Thomas L. Hopkins Director

John Paul Woodley, Jr. Secretary of Natural Resources (804)527-5020 Fax (804) 527-5106 Http://www.deq.state.va.us

MAY 15 1998

Gerard Seeley, Jr. Piedmont Regional Director

David Klossner Vice President of Manufacturing Rehrig International 901 Lombardy Street Richmond, Virginia 23220

Dear Mr. Klossner:

On January 23, 1997, you entered into a consent order with DEQ to resolve certain issues pertaining to hazardous waste management at Rehrig International. This letter serves as notice that all terms of the order have been met, and the order is terminated. Please continue to abide by applicable laws and regulations for the proper management of waste. If you have any questions, please contact Cathie P. Franco at (804) 527-5081. Thank you for your cooperation.

Sincerely,

Gerard Seeley/Jr. Regional Director

Piedmont Regional Office

cc:

Cathie P. Franco

5/8/98 Date

Dereferral of Enforcement Case

Piedmont Regional Office

Facility/Owner: Rehrig International
Location: Richmond, VA
Registration No.: <u>VAD089028377</u>
Consent Order/CSO/ Referral Date: 8/96 Permit/Certificate: CO 1/23/97
Violation: <u>VHWMR violations re: tanks, secondary containment, proper job titles, adequate aisle space, HW labeling, and leak detection.</u>
Justification for Cancellation: <u>The order stays in effect until terminated in writing by the Director, or company petitions. Since Rehrig has complied with all terms of the order, it is appropriate for the Director to cancel the order.</u>
Document to Justify: <u>Inspector letter re: compliance, file.</u>
Recommended by: Uthre France Eff. Soc. St. 5/8/98 Name Title Date
Concurrence:
Verson C. William 5/8/18 Mohammed R. World May 11, 9.
Enforcement Manager Date Media Manager Date
11 The 511.98 hand Level 5/11/48
Regional Compliance Manager Date Regional Director Date
Copies: Charlie Stitzer, OE

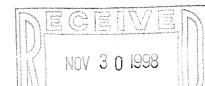
Mohammad Habibi, PRO

Please forward to next name and return original to Cathie Franco

NOVEMBER 25, 1998

LETTER FROM VIRGINIA DEPARTMENT OF WASTE MANAGEMENT TO REHRIG INTERNATIONAL





COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

James S. Gilmore, III Governor

John Paul Woodley, Jr. Secretary of Natural Resources PIEDMONT REGIONAL OFFICE

4949-A Cox Road Glen Allen, Virginia 23060 (804) 527-5020 Fax (804) 527-5106 http://www.deq.state.va.us Dennis H. Treacy Director

Gerard Seeley, Jr. Piedmont Regional Director

November 25, 1998

J. Gregory Dant Rehrig International 901 Lombardy Street Richmond, Virginia 23220

Re: Hazardous Waste Compliance Inspection

Rehrig International, 901 Lombardy St., Richmond

EPA ID # VAD 089028377

Dear Mr. Dant:

Thank you for your cooperation during the Hazardous Waste Management Compliance inspection conducted November 17, 1998 at the above-referenced facility. During this inspection, the facility was evaluated for compliance with the Virginia Hazardous Waste Management Regulations (VHWMR) as a Large Quantity Generator (LQG). A copy of the survey sheet and checklists completed during the inspection are enclosed for your information. The facility was in compliance with the VHWMR.

Thank you for your efforts to maintain a safe environment in the Commonwealth of Virginia. Please call me at 804-527-5132 if you have any questions regarding this matter.

Sincerely,

Charley Banks

Compliance Division

Enclosures

cc: Claire Ballard, OTA

File

DEPARTMENT OF ENVIRONMENTAL QUALITY PIEDMONT REGIONAL OFFICE

SURVEY SHEET FOR INSPECTION OF HAZARDOUS WASTE FACILITIES

NAME of FACILITY:

Rehrig International

ADDRESS:

901 Lombardy Street, Richmond

EPA ID NUMBER:

VAD 089028377

FACILITY

REPRESENTATIVE:

Mr. Greg Dant

TITLE:

Technical Process Supervisor

TELEPHONE NUMBER: 804-355-7864

INSPECTOR'S NAME:

Charley Banks

TITLE:

Env. Insp. Sr.

DATE of INSPECTION:

November 17, 1998

What is the business activity of the firm? (i.e., furniture mfg., 1. metal plating, recycling, etc.)

Manufacture shopping carts (building and plating the frames creates the haz. waste)

Give a brief description of the waste stream(s) [by chemical name, if possible] and hazardous waste code(s) generated by the firm. 2.

> Sludge from nickel plating process (F006, D007) waste acid (D002, D007) waste alkaline (D002, D007, D008)

3. List the highest amounts of hazardous waste generated in any month of the calendar year and the greatest amount accumulated at the site of each type of waste generated.

	Waste Code	Amount Generated	Amount Accumulated
	D002 D002, D007 F006 D002, D007, D008	36,312 pounds 214,382 pounds 27,000 pounds 115,402 pounds	36,312 pounds 64,512 pounds 27,000 pounds 60,830 pounds
4.	Does the facility ever ge 1 kg. of acutely toxic was F020-F023 and F026-F0	aste (P listed waste or	NO

100 kg of clean-up from a spill of P listed waste or F020-F023 and F026-F027 waste?

NO

If yes, then the facility is a large quantity generator.

5. How is the waste presently being handled? Where is it sent? (List all transporters and facilities, or on-site treatment performed).

Transporter: Clean Harbors (MAD039322250), Envirite (PAD010154045) Facilities: Clean Harbors (OHD000724153, CTD000604488), Envirite (PAD010154045)

6. Does the facility generate any hazardous waste that is excluded from regulation? If yes, list the waste and the basis for exclusion.

YES

Waste muriatic acid is neutralized in the WWTP, and sewered under the authority of a pretreatment permit with the City of Richmond.

7. Does the facility: Generate Market Burn used oil that is burned for energy recovery? Underline or circle all that apply. (If the facility markets or burns used oil, fill out the Used Oil Checklist.) Does the generator of used oil to be burned for energy recovery (other than a Conditionally Exempt Small Quantity Generator) mix the used oil with hazardous waste?

NO

If YES, then fill out the Used Oil Checklist.

8. Does the facility generate any hazardous waste that is reclaimed to recover economically feasible amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these?

NO

If Yes, list the waste, where it is sent, and complete the Metals Recovery Checklist.

9. Does the facility generate, transport, store, collect or reclaim spent lead-acid batteries? If yes, underline or circle all that apply. If the facility stores batteries before reclaiming them, complete the Metals Recovery Checklist.

NO

- 10. Based on the above, the facility is a:
 - a. conditionally exempt small quantity generator
 - b. small quantity generator
 - c. generator
 - d. permitted or interim status TSD
 - e. unpermitted TSD (explain in comments section)
 - f. transporter
 - g. other: please explain_____

[Underline or Circle All That Are Applicable]

Check accumulation times and quantities for the three types of generators. If the times or quantities are exceeded, then the facility is moved up to the next category. Complete the appropriate checklist(s).

A conditionally exempt small quantity generator can accumulate for an indefinite period of time until he has accumulated 1000 kg (approx. 5-55-gallon drums) of non-acute hazardous waste, at which time the accumulation time (180 days or 270 days) for small quantity generators begin.

Small quantity generators can accumulate hazardous waste for up to 180 days or 270 days if the disposal site is over 200 miles away (in containers and tanks only). However, if at any time over 6000 kgs of waste is accumulated, then the small quantity generator becomes a generator, or an unauthorized facility, as applicable.

12. List each container and tank accumulation area. Specify the number and capacity of each tank and container. [Note: Include any satellite accumulation areas. Verify that only 55 gallons of any particular hazardous waste code (or one quart of acutely toxic waste) is at that area.]

Location	Number of Containers/Tanks
<90-day area	7 cu yd bags F006 5 55-gal drums F006 3 55-gal drums D007
<90-day tanks	 2 3300-gal tanks 1 4200-gal tank 2 5000-gal tanks

13. Comments:

14. Waste Management Flow Diagram:

(On this page sketch a brief, but detailed, flow diagram that includes how and where the waste is generated, the steps through a treatment system (if any), the steps through storage including satellite accumulation areas. Do this for each waste stream including excluded hazardous waste. Include any wastewater treatment facilities at the company, and verify the type of units included in the system, and any hazardous waste streams going to WWT.)

Waste acid or caustic with chrome ---> 90-day tanks ---> transporter

DEPARTMENT OF ENVIRONMENTAL QUALITY PIEDMONT REGIONAL OFFICE

CHECKLIST FOR HAZARDOUS WASTE INSPECTION OF LARGE QUANTITY GENERATORS (LQG)

FACILITY NAME:

Rehrig International

EPA ID NUMBER:

VAD 089028377

INSPECTION DATE:

November 17, 1998

NOTE: * means Non-Compliance

VIRGINIA HAZARDOUS WASTE MANAGEMENT REGULATIONS

PART/	VIRGINIA HAZARDOUS WASTE MANAGEMENT REGULATION	YES	NO	N/A
SECTION		x		
6.3.	Is a manifest system currently being used for all hazardous waste shipped off site?			
6.2.C.	2. Has the generator determined that the facility has an EPA ID number?	X		
5.5.A.7.	3. Has the generator determined that the transporter has a valid EPA ID number and a valid Virginia Transporter permit?	X		
6.3. 5.3.B.	4. Is the following information on the manifest:			
5.3.B.1.	A. The generator's name, mailing address, EPA ID number, and telephone number?	x		
5.3.B.2.	B. A unique five digit number assigned to the manifest by the generator?	X		
5.3.B.3.	C. The total number of pages of the manifest?	X		
5.3.B.4.	D. The company name and EPA ID number of each transporter used?	X		
5.3.B.5.	E. The company name, site address, and EPA ID number of the facility designated to receive the waste?	X		
5.3.B.6.	F. The U.S. DOT description of each waste to include its proper shipping name, hazard class, and I.D. number (UN/NA) as identified in the Virginia Regulations Governing the Transportation of Hazardous Material?	x		
5.3.B.7.	G. The quantities of waste being shipped? and	х		

PART/ SECTION		REGULATION	YES	NO	N/A
6.4.E.1.d. 9.2.B. 9.2.D.	12. <i>A</i>	At the facility, is the following equipment installed:			
9.2.B.1.	r F	A. An internal communications or alarm system capable of providing immediate emergency instruction to facility personnel if the hazardous waste generation or accumulation personnel threatened by hazardous waste release, fire or explosion?	x		
9.2.B.2.		3. A device (at the scene of hazardous waste generator operations) capable of summoning emergency assistance from Police, Fire Departments, etc.?	x		
9.2.B.3.		C. Portable fire extinguishers, fire control equipment and decontamination equipment? and	x		
9.2.B.4.	6	D. Water at adequate volume and pressure to supply expected fire demands, foam producing equipment, automatic sprinklers or water spray system?	x		
9.2.C.	a	s the above equipment tested and maintained as necessary to assure proper operation and is—a record of the tests and nspections maintained on a log at the facility?	x		
9.2.E.	L 6	Does the facility have adequate aisle space to allow the unobstructed movement of personnel, fire protection equipment, and decontamination equipment during emergencies?	x		
6.4.E.1.d. 9.1.F.4.	15. [Does the generator record inspections of the accumulation area at his facility in an inspection log?	×		
9.2.F.1.		las the facility attempted to arrange agreements with the ocal authorities such that:			
9.2.F.1.a.		A. The police, fire and emergency response teams are familiar with the layout of the site, the properties of the hazardous waste handled at the site, normal working areas, entrances to roads inside the facility and possible evacuation routes?	x		
9.2.F.1.b.	r	3. Where more than one police and fire department might respond to an emergency, do agreements specify a primary emergency authority?			x
9.2.F.1.c.	t	C. Agreements with Commonwealth emergency response teams, emergency response contractors and equipment suppliers are specified? and	x		
9.2.F.1.d.	ŀ	D. The local hospital is familiar with the properties of the nazardous wastes handled and the types of injuries or illnesses which could result from fires, explosions, or releases?	x		
6.4.E.1.d. 9.3.A.1.	\\ \\ \	Does the facility have an established contingency plan to deal with any unplanned sudden or non-sudden release of nazardous waste constituents to the air, soil, ground water or surface water?	x		
9.3.B.		Does the contingency plan contain the following elements:			

PART/ SECTION	REGULATION	YES	NO	N/A
9.3.B.(1,2)	A. A detailed description of emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous waste to air, soil, and water?	x		
9.3.B.3.	B. A description of arrangements agreed to by local police departments, fire departments, hospitals, contractors and Commonwealth and local emergency response teams to coordinate emergency services, as required?	x		
9.3.B.4.	C. A listing of names, addresses, and office and home phone numbers of all persons qualified to act as emergency coordinator? List primary Coordinator.	×		
	NAME: Paul Bauz TITLE: Emergency Coordinator PHONE: Home 804-262-2268 Office 804-355-7864			
9.3.B.5.	D. A list of appropriate emergency equipment necessary to cope with emergencies at the generator facility? Does this list of emergency equipment specify the location and physical description of each item on the list and a brief outline of its capabilities?	x		
9.3.B.6.	E. An evacuation plan for the generator facility where there is a possibility that evacuation could be necessary? and	X		
9.3.C.2.	F. Have copies of the contingency plan been sent to all local police departments, fire departments, hospitals and Commonwealth and local emergency response teams? *** PLEASE LIST ON THE LAST PAGE UNDER "COMMENTS".	x		
0.2.5	19. Has the contingency plan ever been implemented?		<u> </u>	
9.3.F.(9,10)	20. If yes, was a written report filed with the Director within 15 days and were the Director and other required authorities properly notified before operations resumed?			×
6.5.A.1., 2., & 3.	21. Does the generator retain copies of all manifests, annual reports, exception reports, test results, and waste analysis for at least three Years?	×		
6.5.B.1.	22. Has the facility submitted an annual report for the preceding calendar year by March 1?	×		
6.4.E.7.	23. Does the generator who manages HW prohibited under Part XV treat waste in tanks and containers? If yes, must meet requirements of 6.4.E. and 15.1.G.1.d.		×	
15.1.G.1.d.	24. If the generator treats waste in tanks or containers, has the generator developed a written waste analysis plan and kept on-site in the generator's records. Has the generator filed a plan with director at least 30 days prior to treatment.			×
6.5.D.	25. Has the generator ever submitted a release report if responsible for release of HW which threatens public health. (Must notify NRC, local Government, the Department.)		x	

PART/ SECTION		REGULATION	YES	NO	N/A
6.4.E.2.	26.	Does the generator accumulate (store) hazardous waste in containers or tanks on-site for greater than 90 days? If yes, interim status or a TSD permit is required. (Up to a 30 day extension may be granted by the Director.)		x	
6.4.E.1.e.	27.	Has the generator notified the Executive Director by March 1, 1988, of the exact location of the existing container and tank accumulation areas, and at least 15 days prior to use for subsequently established accumulation areas?	x		
6.4.E.1.a.(1) 9.8.	28.	The Use and Management of Containers for 90 Day Accumulation Areas:			
6.4.E.1.a 9.8.B.	29.	Are all containers holding hazardous waste in good condition, i.e., not showing signs of leakage or corrosion or any other deterioration/deformation? If No, list the accumulation areas where there are problems and the type of problems. *** PLEASE LIST ON THE LAST PAGE UNDER "COMMENTS".	x		
6.4.E.1.a. 9.8.C.	30.	Are the containers lined or made of materials compatible with hazardous waste placed into them so that the container will not react with, or otherwise be incompatible with, the hazardous wastes stored?	×		
6.4.E.1.b.	31.	Is the date upon which each period of accumulation begins clearly marked and visible for inspection on each container?	x		
6.4.E.1.c.	32.	Is the container labeled or marked clearly with the words "Hazardous Waste".	x		
9.8.D.1.	33.	Are all containers holding hazardous waste kept closed during storage except as necessary to add or remove waste? If No, list the locations where open containers are found. *** PLEASE LIST ON THE LAST PAGE UNDER "COMMENTS."	x		
9.8.E.	34.	Are the areas where hazardous waste containers are stored inspected by the owner/operator at least weekly?	х		
9.8.F.	35.	Are containers holding ignitable or reactive waste located at least 50 feet from the facility's property line?	х		
9.8.G.1.	36.	Are incompatible wastes placed in separate containers?		х	
9.8.G.3.	37.	Are storage containers holding hazardous wastes which are incompatible with any materials or other hazardous wastes stored nearby separated from the other materials or protected from them by means of dikes, berms, walls, or other devices?		×	
6.4.E.3.a.	38.	Does the generator have satellite accumulation areas where up to 55 gal of any one type of HW (1 QT acutely HW) are accumulated? If yes,		x	
6.4.E.3.a.		A. Is the area located at or near the point of hazardous waste generation where the wastes initially accumulate?			X
6.4.E.3.a.(1) 9.8.B.		B. Are the containers in good condition?			X
6.4.E.3.a.(1) 9.8.C.		C. Are the containers compatible with the waste?			×

PART/ SECTION	REGULATION	YES	NO	N/A
6.4.E.3.a.(1) 9.8.D.1.	D. Are the containers kept closed except as necessary to add or remove waste?	,		X
6.4.E.3.a.(2)	E. Are the containers marked with the words "Hazardous Waste" or other words that identify the contents of the container? and			X
6.4.E.3.b.	F. Are amounts in excess of those allowed being accumulated in the satellite accumulation area? If yes,			X
6.4.E.3.b.	Has the generator marked the excess amount with the date the excess amount began accumulating?			X
6.4.E.3.b.	2) Has the generator either removed the excess amount within three days of the date of excess accumulations or has he complied with all other provisions for accumulation areas? Namely, has he notified the Executive Director about the location of the accumulation area?			×
	39. PLEASE LIST ANY NEWLY REGULATED WASTE THAT IS NOT LAND RESTRICTED (such as D018-D043, F032, F034 or F035) ON THE LAST PAGE UNDER "COMMENTS".			
15.1.A.2.	40. Does the facility generate, transport, treat, store or dispose any land-restricted wastes? (See VHWMR Part 15) ***	×		
15.1.A.3.	41. Is land disposal of wastes occurring? If yes,		X	
15.1.A.3.a.	A. Has the facility been granted an extension to the effective date for land restriction applicable to its restricted waste? OR			X
15.1.A.3.b.	B. Has the facility been granted an exemption from prohibition pursuant to a petition for those land-restricted wastes and units covered by the petition? OR			×
15.1.A.3.c.	C. Are the wastes hazardous only because they exhibit a hazardous characteristic and are they disposed outside the Commonwealth into an injection well without exhibiting any prohibited characteristic of hazardous waste at the point of injection?			X
15.1.E.	42. Has the owner/operator submitted an application for case-by- case extension to the effective date of any applicable restriction?		x	
15.1.F.	43. Has the owner/operator been granted a petition seeking an exemption from a prohibition for the disposal of hazardous waste in a particular unit or units?		X	
15.1.C.1.	44. Are facility representatives diluting the restricted waste or residual from treatment of the restricted waste as a substitute for adequate treatment, to circumvent the effective date of prohibition, to otherwise avoid a prohibition, or to circumvent a land disposal prohibition?		×	

PART/ SECTION	REGULATION	YES	NO	N/A
15.1.D.1.	45. Is the facility treating land-restricted wastes in a surface impoundment or series of surface impoundments? (Note: Evaporation of hazardous constituents in a surface impoundment as the principal means of treatment is not considered to be an acceptable form of treatment for land restricted wastes.)		x	
	46. If yes, does the facility meet the following requirements:			
15.1.D.1.b. 15.1.G. 15.3.C. 15.4. 15.3.	A. Are the residues of the treatment analyzed as specified in VHWMR § 15.1.G. or § 15.3.C. to determine if they meet the applicable treatment standards or VHWMR § 15.4. or where no applicable treatment standard exists, the applicable prohibition levels specified in VHWMR § 15.3?			x
15.1.D.1.c. 9.10.B.1. 10.10.B.3.	B. Has the owner/operator installed two or more liners and a leachate collection system consisting of an upper and lower liner designed, constructed and operated to prevent the migration of any constituents through the liner?			x
15.1.D.1.c. 10.5.	C. Is the facility in compliance with the applicable groundwater monitoring requirements of VHWMR § 10.5?			x
15.1.D.1.d.	D. Has the owner/operator submitted a written certification to the Executive Director that the requirements of 15.1.D.1.c. have been met which states: "I certify under penalty of law that the requirements of 15.1.D.1.c. have been met for all surface impoundments being used to treat restricted wastes. I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment." and			х
15.1.D.1.d.	E. Has the owner/operator submitted a copy of the waste analysis plan for his restricted wastes accompanied by the above certification?			×
15.1.G.1.a.	47. For restricted wastes which the generator is managing for which he has not met the applicable treatment standards, has the generator accompanied each shipment of waste with a notification to the treatment facility of the appropriate treatment standards and any applicable prohibitions?	x		
	48. Did the notification include the following information:			
15.1.G.1. a.(1)	A. EPA Hazardous Waste Number?	x		
15.1.G.1. a.(2)	B. The corresponding treatment standards and all applicable prohibitions set forth in VHWMR § 15.3.C.?	×		
15.1.G.1. a.(3)	C. The manifest number associated with the shipment of waste? and	x		
15.1.G.1. a.(4)	D. Waste analysis data, where available?	х		

PART/ SECTION	REGULATION	YES	NO	N/A
15.1.G. 1.b.	49. For restricted wastes which the generator has determined can be land disposed without further treatment, has the generator accompanied each shipment of waste with a notification and certification to the land disposal facility that the waste meets the applicable treatment standards and the applicable prohibitions of VHWMR § 15.3.C.?			x
	50. Did the notification include the following information:			
15.1.G.1. b.(1)(a)	A. EPA Hazardous Waste Number?			×
15.1.G.1.	B. The corresponding treatment standards and all applicable prohibitions?			×
b.(1)(b) 15.1.G.1.	C. The manifest number associated with the shipment of waste? and			×
b.(1)(c) 15.1.G.1.	D. Waste analysis date, where available?			×
b.(1)(d) 15.1.G.1. b.2.	 51. Was the certification signed by an authorized representative, and did it state the following: "I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in VHWMR § 15.4. and all applicable prohibitions set forth in VHWMR § 15.3.C. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment." 			x
15.1.G.1.c.	52. Has the generator received a case-by-case exemption on restricted waste, been granted an exemption through petition, or those wastes subject to a national variance, has the generator forwarded notice with the waste to the land disposal facility stating that the waste is exempt from the land disposal restrictions?		×	
15.1.G.1.g.	53. Does the generator retain on-site copies of all notices, certifications, demonstrations, waste analysis data, and other documentation for at least five years from the date the waste was last sent to on-site or off-site treatment, storage or disposal?	×		
15.5.	54. Is the generator storing land restricted waste? (For one year storage only)		X	
15.5.1.a.	55. If yes, is the storage on-site solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment or disposal?			x

COMMENTS:

DEPARTMENT OF ENVIRONMENTAL QUALITY PIEDMONT REGIONAL OFFICE

CHECKLIST FOR HAZARDOUS WASTE INSPECTION OF TANKS

FACILITY NAME:

Rehrig International

EPA ID NUMBER:

VAD 089028377

INSPECTION DATE:

November 17, 1998

NOTE: * means Non-Compliance

VIRGINIA HAZARDOUS WASTE MANAGEMENT REGULATIONS

PART/ SECTION	REGULATION	YES	NO	N/A
6.4.E.1.e.	Has the generator notified the Executive Director of the location of all hazardous waste tank accumulation areas?	x		
	A. List all of the tank accumulation areas and give a brief description of each one in the Comment Section. Include the age of each tank, if Known and the type of waste accumulated.			
6.4.E.2.	B. Is the tank used to accumulate hazardous waste for greater than 90 days? If YES,		×	
	C. Then has the facility applied for a hazardous waste Storage Permit? (If NO, complete the Unauthorized Facility Checklist).			х
6.4.E.1.c.	2. Is each tank marked with the words "Hazardous Waste"?	х		
9.9.A.1.	3. Is the tank used to store or treat hazardous waste that contains no free liquids as demonstrated by the Paint Filter Liquids Test (i.e., solids only)? If yes, exempted from 9.9.D.(Items # 5-15 below.)		x	٨
9.9.A.2.	4. Does the tank (including sumps) serve as part of a primary secondary containment system to collect or contain releases of hazardous waste? If yes, exempted from 9.9.D.(Items # 5-15 below.)		x	
9.9.D.1.	5. Has secondary containment been provided for each of the following units in order to prevent the release of HW to the environment:			
9.9.D.1.a.	A. New tank systems installed since January 1, 1988?	х		
9.9.D.1.b.	B. Existing tanks used to store or treat F020, F021, F022, F023, F026, or F027?			x
9.9.D.1.c.	C. Existing tanks whose documented age is greater than fifteen years of age?			х

PART/ SECTION	REGULATION	YES	NO	N/A
9.9.D.1.c.	D. Existing tanks whose documented age is less than fifteen years of age? If yes, when will the tank become fifteen years old? *** PLEASE REMARK ON THE LAST PAGE UNDER "COMMENTS".			X
9.9.D.1.d.	E. Existing tanks for which the age cannot be documented within eight years of January 12, 1987? But, if facility is greater than 7 years old, by time reaches 15 year old? If yes, when will the facility become fifteen years old? *** PLEASE REMARK ON THE LAST PAGE UNDER "COMMENTS". and	·		×
9.9.D.1.e.	F. Tank systems that store or treat materials that become hazardous wastes subsequent to January 12, 1987, within time intervals required in §9.9.D.1.a. through 9.9.D.1.d.?			x
9.9.D.2.	6. Does the secondary containment provided for units above meet the following requirements:			
9.9.D.2.a.	A. Is the secondary containment designed, installed and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system?	x		
9.9.D.2.b.	B. Is the secondary containment system capable of detecting and collecting any releases and accumulated liquids until the collected material can be removed?	X		
9.9.D.3.a.	C. Is the secondary containment constructed of or lined with materials that are compatible with the waste(s) to be placed in the tank system and of sufficient strength and thickness to prevent failure due to pressure gradients, physical contact with the waste, climatic conditions, stress of installation, and the stress of daily operation?	x		
9.9.D.3.b.	D. Is the secondary containment placed on a foundation or base capable of providing support to the secondary containment system and resistance to pressure gradients above and below the system owing to settlement, compression or uplift?	×		
9.9.D.3.c.	E. Is the secondary containment provided with a leak-detection system that is designed or operated so that it will detect the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours or at the earliest practicable time if the existing detection technology or site conditions will not allow detection of a release within 24 hours? and	x		
9.9.D.3.d.	F. Is the secondary containment system sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation, and has waste that has spilled or leaked and accumulated precipitation been removed from the secondary containment within 24 hours or in as timely a manner as possible to prevent harm to human health or the environment?	×		
9.9.D.4.	7. Does the secondary containment for the tanks consist of one or more of the following:			

PART/ SECTION		REGULATION	YES	NO	N/A
9.9.D.4.a.		A. A liner (external to the tank);	х		v
9.9.D.4.b.		B. A vault;		x	
9.9.D.4.c.		C. A double-walled tank; OR		х	
9.9.D.4.d.		D. An equivalent device as approved by the Director?		x	
		FOR EXTERNAL LINER SYSTEMS ONLY:			
9.9.D.5.a.	8.	Is the external liner system:			
9.9.D.5.a.(1)	X.	A. Designed or operated to contain 100% of the capacity of the largest tank within its boundary;	x		
9.9.D.5.a.(2)		B. Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain the precipitation from a 25 year, 24 hour rainfall event?	X		
9.9.D.5.a.(3)		C. Free of cracks or gaps? and	×		
9.9.D.5.a.(4)		D. Designed and installed to completely surround the tank and to cover all surrounding earth likely to come into contact with the waste if released from the tank?	×		
		FOR VAULT SYSTEMS ONLY:			
9.9,D.5 <i>.</i> b.	9.	Is the vault system:			
9.9.D.5.b.(1)		A. Designed or operated to contain 100% of the capacity of the largest tank within its boundary?			х
9.9.D.5.b.(2)		B. Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient capacity to contain the precipitation form a 25 year, 24 hour rainfall event?			. X
9.9.D.5.b.(3)		C. Constructed with chemical-resistant water stops in place at all joints (if any)?			x
9.9.D.5.b.(4)		D. Provided with an impermeable interior coating or lining that is compatible with stored waste that will prevent migration of waste into the concrete?			x
9.9.D.5.b.(5)		E. Provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated is ignitable or reactive? and			x
9.9.D.5.b.(6)		F. Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure?			х
		FOR DOUBLE-WALLED TANKS ONLY:			
9.9.D.5.c.	10.	Is the double-walled tank:			
9.9.D.5.c.(1)		A. Designed as an integral structure (i.e., an inner tank with an outer shell) so that any release from the inner tank is contained by the outer shell;			х

PART/ SECTION	REGULATION	YES	NO	N/A
9.9.D.5.c.(2)	B. Protected, if constructed of metal, from both corrosion of the primary tank interior and the external surface of the outer shell; and			X
9.9.D.5.c.(3)	C. Provided with a built-in, continuous leak detection system capable of detecting a release within 24 hours or at the earliest practicable time?			X
	11. FOR ALL TANK UNITS:			
9.9.D.6.	12. Does the tank system have ancillary equipment?	×		
9.9.D.6.	13. If yes, does the ancillary equipment have secondary containment (e.g., trench, jacketing, double-walled piping) which meets the requirements above? If no, PLEASE EXPLAIN ON THE LAST PAGE UNDER "COMMENTS".	×		
9.9.D.8.	14. For all tank systems for which secondary containment meeting the above requirements has not yet been provided, has the facility complied with the following for the units:			
9.9.D.8.a.	A. For non-enterable underground tanks, has a leak test been conducted at least annually?			X
9.9.D.8.b.	B. For other than non-enterable underground tanks and for all ancillary equipment, an annual leak test or other internal inspection or other tank integrity examination by an independent, Virginia registered professional engineer that addresses cracks, leaks, corrosion and erosion conducted at least annually? and	×		
9.9.D.8.c.	C. Has the owner/operator maintained on file at the facility a record of the results of the above assessments?	X		
9.9.D.8.d.	15. If found to be leaking or unfit for use, owner/operator shall comply with 9.9.G. (Item # 24) below.			
9.9.B.1.	16. For each existing tank system which does not have secondary containment meeting the requirements of VHWMR Section 9.9.D., has the owner/operator determined that the tank system is not leaking or is unfit for use?			X
ì	17. If yes, is a copy of this written assessment reviewed and certified by an independent Virginia registered professional engineer and kept on file at the facility? (If found to be leaking, must comply with 9.9.G.). (Item # 24 below).			×
9.9.E.2.	18. Has the owner/operator used appropriate controls and practices to prevent spills and overflows from tank or secondary containment systems, including:	x		
9.9.E.2.a.	A. Spill prevention controls (e.g., check valves, dry disconnect couplings)? *** DESCRIBE ON THE LAST PAGE UNDER "COMMENTS".	x		
9.9.E.2.b.	B. Overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank)? DESCRIBE ON THE LAST PAGE UNDER "COMMENTS". and,	x		

PART/ SECTION		REGULATION	YES	NO	N/A
9.9.E.2.c.		C. Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation?	x		
9.9.E.3.	19.	Owner/operator shall comply with 9.9.G. below if a leak or spill occurs.			
9.9.F.1.	20.	Does the owner/operator inspect the following at least once each operating day:			
9.9.F.1.a.		A. Overfill/spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order?	×		
9.9.F.1.b.		B. The aboveground portions of the tank system, if any, to detect corrosion or releases of waste?	x		
9.9.F.1.c.		C. Data gathered from monitoring equipment and leak detection equipment (e.g., pressure and temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design; and			x
9.9.F.1.d.		D. The construction materials and the area immediately surrounding the externally accessible portion of the tank system including secondary containment structures to detect erosion or signs or releases of hazardous waste?	x		
9.9.F.2.	21.	For all underground and in-ground hazardous waste storage tanks, are cathodic protection systems present?			x
	22.	If yes, is the cathodic protection inspected according to the following schedule:			
9.9.F.2.a.		A. The proper operation of the cathodic protection system shall be confirmed within six months after initial installation, and annually thereafter; and			x
9.9.F.2.b.		B. All sources of impressed current shall be inspected and/or tested, as appropriate, at least bimonthly (i.e., every other month):			x
9.9.F.3. 9.1.F.4.	23.	Are the inspections in 9.9.F.1. and 9.9.F.2. documented in the facility operating record or log?	х		
9.9.G.	24.	For tank systems or secondary containment which have been determined to be leaking or unfit for use, or from which there has been a leak or spill, has the owner/operator satisfied the following requirements:			
9.9.G.1.	,	A. Has the owner/operator immediately stopped the flow of hazardous waste into the tank system or secondary containment and inspected the system to determine the cause of release?			x
9.9.G.2.a.		B. For releases from the tank system, has the owner/operator within 24 hours or at the earliest practicable time, removed as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system?		·	х

ART/		REGULATION	YES	NO	N/A
9.9.G.2.b.		C. For releases to a secondary containment system, have all released materials been removed within 24 hours or in as timely manner as is possible to prevent harm to human health and the environment?			x
9.9.G.3.a.		D. Has the owner/operator prevented further migration of the leak or spills to soils or surface water? and			X
9.9.G.3.b.		E Has the owner/operator removed and properly disposed of any visible contamination of the soil or surface water?			X
9.9.G.4.a.	25.	Have all releases to the environment been reported to the Director within 24 hours of detection?			X
9.9.G.4.c.	26.	Within 30 days of detection of release, has a report been submitted to the Director?			X
	27.	If yes, did the report contain the following information:			
	27.	A. Likely route of migration of the release?			×
9.9.G.4.c.(1)	_				x
9.9.G.4.c.(2)		B. Characteristics of the surrounding soil?			
9.9.G.4.c.(3)		C. Results of any monitoring or sampling conducted in connection with the release, if available, or as soon as they became available?			X
9.9.G.4.c.(4)		D. Proximity to downgradient drinking water, surface water, and population areas; and			×
9.9.G.4.c.(5)		E. Description of response actions taken or planned?	-	-	+^-
9.9.G.5.c.	28.	If the cause of the release was a leak from the primary tank system into the secondary containment system, was the system repaired prior to returning the tank system to service?			×
9.9.G.5.d.	29.	If the cause of the release was a leak to the environment from an underground or on-ground component of a tank system without secondary containment, did the owner/operator provide secondary containment before returning the unit to service?			x
9.9.G.5.d.	30.	If the cause of the release was a leak to the environment from an aboveground component of a tank system without secondary containment, was the component visually inspected and repaired?	1		×
9.9.G.6.	31.	For all units which have been repaired, if any, did the owner/operator obtain certification from an independent, Virginia registered professional engineer that the repaired system is capable of handling hazardous wastes without release for the intended life of the system prior to returning the unit to service?			×
9.9.H.1.	32.	At closure of any hazardous waste tank system, did the owner/operator remove or decontaminate all hazardous waste residues, contaminated containment system components, contaminated soil, and structures and equipment contaminated with waste, and manage them as hazardous waste?	1		x

PART/ SECTION	REGULATION	YES	NO	N/A
9.9.1.	33. Are ignitable or reactive wastes placed in the tank system? If yes,	:	x	
9.9.I.1.a.	A. Was the waste treated, rendered or mixed before or immediately after placement in the tank system so that the resulting waste, mixture or dissolved material no longer meets the definition of ignitable or reactive waste; OR	:		×
9.9.I.1.b.	B. The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; OR			×
9.9.I.1.c.	C. The tank system is used solely for emergencies?			x
9.9.1.2.	D. Does the owner/operator comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys or an adjoining property line as required in NFPA's "Flammable and Combustible Liquids Code"?			x
9.9.J.1.	34. Are incompatible wastes, or incompatible wastes and materials placed in the same tank system?		x	
9.9.J.2.	35. If yes, was the tank and all related equipment decontaminated first?			x
	For Treatment,Storage Facilities only.			
9.9.K.	36. If yes, does the facility meet the following requirements:			
9.9.K.1.	A. Did the owner/operator first conduct waste analyses and trial treatment or storage tests?			×
9.9.K.2.	B. Did the owner/operator obtain written, documented information on similar waste under similar operating conditions to show that the proposed treatment or storage will not cause the tank, ancillary equipment or the secondary containment to rupture, leak, corrode or otherwise fail?			x

COMMENTS:

There are five tanks for the <90-day accumulation of hazardous waste: 2 @ 3300 gallons, 1 @ 4200 gallons, and 2 @ 5000 gallons. They were installed in 1997.

SEPTEMBER 23, 2003

INTERNAL MEMORANDUM – VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY





4949-A Cox Road, Glen Allen, VA 23060-6296

804/527-5020

MEMORANDUM

TO:

Dan Gwinner

DEQ-CO Office of Waste Programs

FROM:

Leanne Raynor, Compliance Inspector

DATE:

September 23, 2003

SUBJECT:

Unannounced inspection of Rehrig International

901 N. Lombardy Street and deactivation of EPA I.D. Number

VAD089028377

SUMMARY:

On Wednesday September 10, 2003, DEQ-PRO conducted an unannounced inspection of Rehrig International, at 901 N. Lombardy Street, Richmond, VA 23220. Rehrig International no longer occupies the site. Rehrig International is currently listed in RCRAInfo as a Large Quantity Generator (LQG). The previous DEQ inspection was conducted on November 17, 1998.

According to Mr. Tommy Bell, Superintendent with KBS, Site contractor, the responsibility for the site was turned over this month to Kroger, which plans to open a grocery store in mid-October 2003. KBS is located at 8050 Kimway Drive, Richmond, VA 23228. The phone number is (804) 262-0100. Mr. Bell will provide DEQ-PRO contact information to the Kroger manager. The information for the Kroger contact was not available at the time of the inspection.

Please deactivate the number at this site. Rehrig is no longer at this location. The site is not currently generating any hazardous waste.

If you need any clarification, or additional information, please call me at (804) 527-5122.

Page 1				RCRA	Evalua	tion - Vic	lation -	RCRA Evaluation - Violation - Enforcement Form	ent For	ш		Rev 9/02 WEM	WE
Handler's	Handler's EPA ID Number:		VAD089028377	3377	R	RCRA Non-Notfier: Yes	otfier: Yes	No X	(If Ye	s, the Handle	r section mu	(If Yes, the Handler section must be completed.)	
Handler's Name	Name:	8	REHRIG INTERNATIONAL	ERNATION	IAL					ı		- 1	T
Physical Address:	ddress:)6	901 N LOMBARDY ST.	ARDY ST.			City: RICHMOND,	IMOND,	State:	e: VA	Zip Code:	de: 23220	
Mailing Address:	dress:						City:		Stat	.: •	Zip Co	de:	
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